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Injuries in Federal Correctional Workers

Name of Candidate: Casey Skvorc
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Dissertation and Abstract Approved

Jerome E. Singer, Ph.D.
Committee Chairperson

Date

Neil E. Grunberg., Ph.D.
Committee Member

Date

Michael Feuerstein, Ph.D.
Committee Member

Date

Tracy Sbrocco, Ph.D.
Committee Member

Date

Evelyn L. Lewis, M.D.
Committee Member

Date

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Federal correctional workers are tasked with protecting society from felons convicted of federal crimes and remanded to the custody of the Attorney General for incarceration. The physical and psychological demands placed upon these workers are great, and these workers have greater risk factors for occupational injury and disease than do other federal law enforcement officers. This dissertation examines rates of occupational injuries for approximately 30,000 federal correctional workers with regard to the security level of the prison worked in, the occupation of the correctional worker, gender, and associated number of days away from work after an occupational injury. Also analyzed is a Perception of Personal Well-Being (PWB) instrument, part of a widely circulated self-report measure of physical and emotional well-being administered to federal correctional workers on a nationwide basis. It was hypothesized that security level, and occupation, would be related to higher levels of occupational injury, lower levels of PWB, and that higher security levels would be associated with significantly lower levels of perception of personal well-being. Security level is significantly related to rates of occupational injury, in that federal correctional workers at Minimum security institutions had lower odds for the occurrence of occupational injuries than all other security levels except the AdMax security level. Security level was not a significant predictor for aggregate perception of well-being. Correctional officers had higher rates of occupational injuries than non-correctional officers. Security level was not a significant predictor of aggregate measures of PWB. Correctional officers had higher aggregate scores of PWB than non-correctional officers. Males had higher injury rates per 100 staff than females, and correctional officers had higher injury rates per 100 staff than non-correctional officers. Staff working at minimum security prisons had lower rates of injury per 100 staff than all other security levels. Male staff had higher mean levels of COP days than female staff, and correctional officers had higher numbers of COP days than non-correctional officers. The North Central region had higher a higher injury rate per 100 staff of all the regions, and the lowest mean level of COP days after an injury of all the regions. Male staff had higher levels of PWB than female staff, and correctional officers had higher levels of PWB than non-correctional officer staff.

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Casey Skvorc
Department of Medical and Clinical Psychology
Uniformed Services University of the Health Sciences

ABSTRACT

Title of Dissertation: Perception of Personal Well-Being and Workers' Compensation Injuries in Federal Correctional Workers

Casey Skvorc
Doctor of Philosophy
2001

Dissertation Directed by: Neil E. Grunberg, Ph.D.

Federal correctional workers are tasked with protecting society from felons convicted of federal crimes and remanded to the custody of the Attorney General for incarceration. The physical and psychological demands placed upon these workers are great, and these workers have greater risk factors for occupational injury and disease than do other federal law enforcement officers. This dissertation examines rates of occupational injuries for approximately 30,000 federal correctional workers with regard to the security level of the prison worked in, the occupation of the correctional worker, gender, and associated number of days away from work after an occupational injury. Also analyzed is a Perception of Personal Well-Being (PWB) instrument, part of a widely circulated self-report measure of physical and emotional well-being administered to federal correctional workers on a nationwide basis. It was hypothesized that security level, and occupation, would be related to higher levels of occupational injury, lower levels of PWB, and that higher security levels would be associated with significantly lower levels of perception of personal well-being. Security level is significantly related to rates of occupational injury, in that federal correctional workers at Minimum security institutions had lower odds for the occurrence of occupational injuries than all other security levels except the AdMax security level. Security level was not a significant

predictor for aggregate perception of well-being. Correctional officers had higher rates of occupational injuries than non-correctional officers. Security level was not a significant predictor of aggregate measures of PWB. Correctional officers had higher aggregate scores of PWB than non-correctional officers. Males had higher injury rates per 100 staff than females, and correctional officers had higher injury rates per 100 staff than non-correctional officers. Staff working at minimum security prisons had lower rates of injury per 100 staff than all other security levels. Male staff had higher mean levels of COP days than female staff, and correctional officers had higher numbers of COP days than non-correctional officers. The North Central region had higher a higher injury rate per 100 staff of all the regions, and the lowest mean level of COP days after an injury of all the regions. Male staff had higher levels of PWB than female staff, and correctional officers had higher levels of PWB than non-correctional officer staff.

Perception of Personal Well-Being and Workers'
Compensation Injuries in Federal Correctional Workers

by

Casey Skvorc

Doctoral Dissertation Submitted to the Faculty of the
Department of Medical and Clinical Psychology
Graduate Program of the Uniformed Services University
of the Health Sciences in partial fulfillment
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Introduction and Statement of the Problem

Federal correctional workers are tasked with protecting society from felons convicted of federal crimes and remanded to the custody of the Attorney General for incarceration. The physical and psychological demands placed upon these workers are great, and these workers have greater risk factors for occupational injury and disease when compared to other federal law enforcement officers, including the Federal Bureau of Investigation (FBI), the Drug Enforcement Authority (DEA), and the United States Marshals Service (USMS) (U.S. Department of Labor, 1999). For the time period of 1998-1999, in which these occupational injuries were analyzed, the Federal Bureau of Prisons (BOP) had an annual workers' compensation cost of about \$24 million, about \$750 per employee (U.S. Department of Labor, 1999).

The work of federal correctional employees is characterized by intense psychological and physical effort, chronic anticipation of the possibility of physical attack in environments that are often constrained, overcrowded, and dangerous. They have rotating job postings and shifts, and work at prisons that operate every day of the year. They have little personal control over their work environment, and are required to maintain a professional relationship with inmates while maintaining constant vigilance to the possibility of assault against themselves, other staff, or other federal prisoners. The staff must exercise constant precautions to prevent escape attempts or serious infraction of disciplinary rules (Dunne and Morrison, 1991; Grossi and Berg, 1991; Cheek and Miller, 1983). Bureau of Prisons correctional staff provide a critical societal function in incarcerating, feeding, clothing, providing medical and mental health care, drug treatment, religious services, recreational services, educational and vocational training, and rehabilitation to about 130,772 federal prisoners (Bureau of Prisons, 1999).

Previous studies of occupational stress and correctional officers have reported physical problems and psychological ailments associated with chronic levels of stress, including coronary heart disease, ulcers, hypertension, anxiety, and depression, at higher frequencies than other non-correctional occupations (Gross, et al., 1994; Ostfield, et al., 1987). The first empirical study of the stress of correctional officers, conducted by Alvarez and Stanley in 1930, began as a study to examine prison inmates under stress. An unexpected finding was that the mean blood pressure of the inmate population was less than the mean blood pressure of correctional officers (Gross, et al., 1994).

Workers' compensation costs in the Bureau of Prisons (BOP) have doubled in the 1990's, to the annual budget of about \$24 million for 1998-1999, the time frame for which these data were drawn for the research reported in this doctoral dissertation. If workers' compensation costs continue to rise at the current rate, then the BOP workers' compensation budget will exceed \$60 million by 2007 (BOP, 1998). Concern for federal correctional worker well-being and the dollar cost of treating occupational injuries highlight the importance of identifying potential predictive factors that contribute to the rising costs of workers' compensation to the BOP. The nature, causes, and consequences of these factors warrant examination so that programs can be developed to help prevent occupational injuries, to reduce lost time and productivity of staff, and to reduce the costs of medical treatment and wage replacement.

The present research examined workers' compensation claims and self reports of perception of personal well-being for federal correctional workers during the time frame of July 1998 through June, 1999. This time frame was chosen because it was the most complete data set in existence at the time this work was begun. In this project, perception of personal well-being

served as a measure of physical and emotional well-being for federal correctional staff, and incidence and prevalence of new workers' compensation claims filed during the study period were the measure for "occupational injuries."

The central premise of this research is that federal correctional workers who are assigned to federal prisons of higher security levels are exposed to higher levels of occupational stressors than are federal correctional workers assigned to lower security levels, and that these stressors manifest themselves in higher frequency of workers' compensation injuries. Indicators of occupational stress were hypothesized to be reflected in the perception of personal well-being (PWB) inventory, a portion of the Bureau of Prisons Social Climate Survey questionnaire distributed to field correctional staff that assesses self-report measures of psychological and physical well-being, including anxiety, depression, anger, frustration, somatic complaints, changes in alcohol and tobacco consumption, and frequency of exercise. As with workers' compensation injuries, the PWB measures were expected to indicate lower levels of personal well-being at higher security levels, reflecting increased occupational stress for correctional workers at these security levels compared to their colleagues at lower security levels. This study, correlating occupational stress to the security level of the prison employees with a measurable outcome of frequency of employee injury and employee self-report perception of well-being measures, was the first of its kind for federal corrections. This research provides an objective measure to identify federal correctional employees who are at greater risk for on-the-job injuries in their roles in keeping society safe from federally convicted felons.

To provide a clearer understanding of this analysis of perception of well-being and workers' compensation injuries in federal correctional workers, a background of the Bureau of

Prisons is provided, with a discussion of its history, mission, staffing, as well as the characteristics of federal prisoners. The Department of Labor, Office of Workers' Compensation, is briefly reviewed from a legislative history perspective, followed by a description of the workers' compensation program available to federal correctional employees, and Department of Labor/Office of Workers' Compensation definitions of qualifying injuries/occupational diseases, including criteria for coverage and extent of benefits. The Bureau of Prisons' Prison Social Climate Survey is then explained and discussed, with an emphasis on the Perception of Personal Well-Being measure.

Five hypotheses, each with an accompanying rationale are presented. A discussion of subjects, independent and dependent variables are provided and explained. The Methods section explains how workers' compensation injury data are collected, and how the PWB measure is scored. The Data Analysis section provides an explanation of the strategy to obtain the results of this study. The Results section presents the findings of the study. The Discussion section summarizes and interprets these findings, addresses limitations of the study, and suggests future directions for further investigations. The Conclusion sets forth the final points of this dissertation.

The Federal Bureau of Prisons

History, Leadership, and Mission

The Bureau of Prisons (BOP) was created in 1930 by Congress. At the time of its creation, the federal penitentiaries at Atlanta, Georgia; Fort Leavenworth, Kansas; and McNeil Island, Washington, were the principal sites for the incarceration of approximately 11,400 federal and military prisoners. They boarded most federal and military prisoners in state correctional facilities. In 2001, 94 federal prisons were housing more than 130,000 federal prisoners. Approximately they schedule twenty-five additional federal prisons to open before 2004, when they project the federal prison inmate population to be more than 160,000.

There have only been six Directors of the BOP since its creation. Unlike most federal law enforcement agencies, the Director of the Bureau of Prisons is not a political employee. The Director, Regional Directors, Wardens, and all staff are professional merit civil service, rather than political, employees. This non-politicized work force constitutes a departure from the hiring methods of many state correctional systems and other federal law enforcement agencies within the Department of Justice.

The BOP's Mission Statement, which states the agency's focus and purpose, reads: "The Federal Bureau of Prisons protects society by confining offenders in the controlled environments of prisons and community-based facilities that are safe, humane, and appropriately secure, and which provide work and other self-improvement opportunities to assist offenders in becoming law-abiding citizens" (Bureau of Prisons, 2001).

Augmenting the agency Mission Statement are seven Cultural Anchors/Core Values.

These include **Bureau Family** (healthy supportive relationships among staff and organizational responsiveness to staff needs), **Sound Correctional Management** (maintaining security and control of prisons while utilizing the least restrictive means necessary), **Correctional Workers First** (all BOP staff share a common role as correctional workers), **Promotion of Integrity** (honesty and integrity in the professional efforts of its staff and allocation of resources), **Recognition of the Dignity of All** (recognition of the inherent dignity of all human beings and their potential for change, and that offenders are incarcerated as punishment, not for punishment), **Career Service Orientation**, **Community Relations**, and **High Standards** (Bureau of Prisons, 2001).

Structure of the BOP

Because this dissertation examines injuries within the BOP and their relationship to occupation, security level, type of work, and gender of federal correctional workers, a brief description of the structure of the BOP is provided. While the primary business of the BOP is operating federal correctional facilities, administrative, support, and policy functions are carried out by the Central Office, six regional offices, and two national training centers (see Appendix). The Central Office is located in Washington, D.C., and is divided into nine divisions and the National Institute of Corrections. The prisons that are the focus of the present research are part of the “Field Operations” on the BOP organizational chart. The daily operations of the prisons are under the supervision of the Regional Directors.

The Administration Division develops and disburses the Bureau’s budget, oversees financial management, and is responsible for the BOP’s capacity planning initiatives, site selection activities, acquisition and construction of new federal prisons, and facilities

management programs. The Community Corrections and Detention Division is responsible for community-based incarceration, short-term confinement, some long-term contractual confinement, incarceration of juveniles in community (non-BOP) facilities, and the BOP's privatization efforts. The Correctional Programs Division manages the correctional services and security-related operations, as well as inmate case management, unit operations and management, religious programs, psychological services, counseling programs, drug treatment programs, programs for special needs offenders, inmate records management and sentence computation, and Federal Witness Protection Program implementation. The Health Services Division administers the health care programs of the Bureau and ensures that Federal inmates receive essential medical, dental, and psychiatric services. It is also responsible for the Bureau's environmental and occupational health services (which includes administration and management of the BOP's workers' compensation program) and food services (Bureau of Prisons, 2001).

The Human Resources Management Division is responsible for recruitment, selection, training, and development, of Bureau staff members, as well as employee pay and position management, security and background investigations, labor/management relations, and equal employment opportunity. The Industries, Education, and Vocational Training Division oversees Federal Training Industries, also known by the trade name Unicor. Unicor is a wholly owned Government corporation that provides employment and training opportunities for inmates confined in Federal correctional facilities. This division also has managerial oversight of the Bureau's education, recreation, and vocational training programs (Bureau of Prisons, 2001).

The Information, Policy, and Public Affairs Division is responsible for managing the Bureau's information resources, research and evaluation programs, security technology

programs, public affairs, and policy review. The Office of General Counsel provides legal advice, assistance, and representation to Bureau officials in the areas of legislation regarding correctional issues, commercial law, inmate litigation, administrative complaints, ethics issues, equal employment opportunity law, freedom of information and Privacy Act issues, and labor law. The Program Review Division provides review oversight for all programs and operations of the Bureau through the development of strategic planning initiatives, and the administration of program reviews to measure performance and evaluate the strength of internal control systems and compliance with laws, regulations, and standards (Bureau of Prisons, 2001).

The Bureau of Prisons consists of nine different types of facilities, including the Federal Correctional Complex (FCC), Federal Correctional Institution (FCI), Federal Medical Center (FMC), Federal Prison Camp (FPC), Federal Transfer Center (FTC), Metropolitan Correctional Center (MCC), Medical Center for Prisoners (MCFP), Metropolitan Detention Center (MDC), and United States Penitentiary (USP) (see Appendix). The Bureau of Prisons operates federal prisons of different security levels to house a wide spectrum of federal offenders with differing security, medical, and programmatic needs. Security levels are based on features including the presence of external patrols, gun towers, security barriers, or detection devices; the type of housing within the institution; internal security features; and the staff-to-inmate ratio. Each facility is placed in one of five groups: minimum, low, medium, high, and administrative (Bureau of Prisons, 2001).

Minimum security institutions, also referred to as Federal Prison Camps (FPC's), have dormitory housing, a relatively low staff-to-inmate ratio, and no fences. These institutions are work- and program-focused, and many are located next to larger prison institutions or on military

bases, where inmates help serve the labor needs of the institution or of the base. Low-security Federal Correctional Institutions have double-fenced perimeters, predominantly dormitory housing, and strong work and program components. Federal Correctional Institutions (FCI's) fall into this category, as well as the medium security category. The staff-to-inmate ratio in these institutions is higher than that found in minimum security facilities. Medium-security FCI's have strengthened perimeters, often double fenced with razorwire and electronic detection systems. Housing is made up of prison cells, there are a wide variety of work and treatment programs, and an even higher staff-to-inmate ratio than found at lower security facilities (Bureau of Prisons, 2001).

High-security institutions also are known as U.S. Penitentiaries (USP's), and have tightly secure perimeters, including walls or reinforced fences, multiple and single occupant cell housing, and close staff supervision of inmate movement. Administrative facilities are institutions with special missions, such as the detention of noncitizen or pretrial offenders, the treatment of inmates with serious or chronic medical problems, or the containment of extremely dangerous, violent, or escape prone inmates. Administrative facilities are capable of holding inmates of all security categories, and include Metropolitan Correctional Centers (MCCs), Metropolitan Detention Centers (MDCs), Federal Medical Centers (FMCs), the Medical Center For Prisoners (MCFP), and the administrative units of the Federal Correctional Complexes (FCCs). Metropolitan Correctional Centers (MCCs) and Metropolitan Detention Centers (MDCs) are found in major cities, New York City and Chicago for example, and are pre-trial facilities where individuals who are arrested for federal crimes are held while they are waiting trial. Because pre-trial inmates are presumed innocent (even though they have likely been denied bail because of their flight risk), they have greater privileges than post-conviction inmates

at other BOP facilities. Access to attorneys and visitors is often 7 days per week, 24 hours per day. MCCs tend to be high-rise facilities with little in the way of programs for education or employment for inmates. They are located in close proximity to the federal courts to allow easy access to the presiding judge's courtroom. FMCs have established extensive relationships with medical providers in the communities in which they are located, in the event that medical care is required that the BOP is not equipped to provide. For example, the FMC Rochester, Minnesota, has a strong relationship with the Mayo Clinic.

Federal Medical Centers (FMCs) are the BOP's medical facilities -- prison hospitals that exist to treat federal prisoners for diseases, ranging from AIDS to cancer to hepatitis to psychosis and senile dementia. Fully accredited by the Joint Commission of American Healthcare Organizations (JCAHO), these facilities are staffed with medical and allied health staff of virtually every specialization. Sick federal inmates are transferred to FMCs for treatment and, if feasible, they are returned to their regular institutions. Some FMCs (e.g., Butner, North Carolina, and Fort Worth, Texas) have chronic care facilities for mental health and geriatric patients, respectively.

Federal Correctional Complexes are made up of a cluster of federal prisons, with an eye to sharing facilities for an economy of scale. For example, at the FCC Florence, there exists an FPC, an FCI, a USP, and the Administrative Super-Maximum Security Facility. By locating these facilities closely together, inmates can be quickly and efficiently transferred between institutions in the event of a pressing need, staff can be diverted to meet emergencies, and some functions (e.g., human resources) may be shared by all the institutions. A map with locations of all federal prisons appears in the Appendix. All facilities identified on the map, except the

Central Office, Regional Offices, and Training Centers, are included in the present research (Bureau of Prisons, 2001). The facilities excluded do not function as administrative facilities and do not have inmates present.

The Bureau of Prisons has six regional offices which directly oversee the operations of the facilities within their respective regions of the country. Staff in regional offices include a regional director and deputy regional director, as well as administrators of human resources, education, health services, financial management, unit/case management, correctional services, psychology services, chaplaincy services, facilities development and operations, food service, and community corrections. These staff maintain close contact with their institution counterparts. Regional office staff provide management and technical assistance to institution and community corrections personnel. Regional administrators conduct workshops, conferences, and specialized training programs, give technical assistance to State and local criminal justice agencies, and contract with community agencies to provide offender placement in community corrections centers. The Regional Offices are located in Annapolis Junction, Maryland; Kansas City, Missouri; Philadelphia, Pennsylvania; Dallas, Texas, Atlanta, Georgia; and Dublin, California (Bureau of Prisons, 2001).

The BOP operates two training centers: the BOP Staff Training Academy, located at the Federal Law Enforcement Training Center in Glynco, Georgia, and the Management and Specialty Training Center in Aurora, Colorado. Introductory training for all incoming BOP staff is conducted at the Staff Training Academy in Glynco, and specialized professional training conducted in Aurora (Bureau of Prisons, 2001).

The BOP also administers the National Institute of Corrections (NIC), located in

Washington, D.C. An NIC Jails Division/Academy Division and Information Center is located in Longmont, Colorado. The National Institutes of Corrections provides technical assistance, training, and information to State and local correctional agencies throughout the country. It also operates a clearinghouse known as the NIC Information Center. NIC provides training to State and local correctional personnel as well as Bureau employees at its Academy (Bureau of Prisons, 2001).

Classification of Prison Facilities

A description of each security level of classification is provided to clarify how the various federal prisons are stratified. A description of each security level of classification is provided. The BOP prison security classification system indicates that working conditions differ, depending on the facility's security level. These different working conditions may result in a different perception of personal well-being and different rates of workers' compensation injuries.

BOP Employees

The BOP has approximately 31,000 staff, of whom 73% are male and 27% female. The staff are about 66% white, 20% African-American, 10% Hispanic, 2% Asian, and 2% Native American. All staff working within a federal prison have direct contact with inmates. Most employees stationed at federal correctional institutions supervise, safeguard, and train inmates, in addition to their regular occupational duties. For example, accountants at FMC Fort Worth supervise a cadre of inmate data entry clerks as part of their duties as financial managers. In addition to instructing, counseling, and maintaining custody of inmates, many institution personnel supervise groups of inmates assigned to work in and about the facility. Federal prisons operate every hour and every day of the year. Employees are assigned to work each shift, and

rotate posts, shifts, and days off. Applicants are subject to a background investigation to determine suitability for employment as a law enforcement official. The background investigation inquires into prior arrests, incarceration, job stability, and credit history (Bureau of Prisons, 2001).

All employees working in a federal prison are federal law enforcement officers. As such, they are required to maintain the security of the institution, regardless of their formal job assignment, whether secretary, accountant, correctional officer, associate warden, or warden. Staff regularly perform as law enforcement officers during training, emergency situations, staff shortages, and under any type of operating crisis. Specific correctional responsibilities include custody and direct supervision of inmates, responding to emergencies and institutional disturbances, participating in fog and escape patrols, and assuming correctional officer posts when necessary. All staff must be prepared to use physical control in situations where necessary, such as fights among inmates, assaults on staff, riots, or escape attempts (Bureau of Prisons, 2001).

To be considered for employment, applicants must be U.S. citizens, and younger than 37 years old at the time of appointment, subject to Public Law 101-509, establishing the mandatory retirement age of 57 for persons in law enforcement positions. Age waivers for initial appointments can be granted up to the age of 39 for registered nurses and psychologists. Medical doctors and physician assistants are exempt from the age requirement at time of appointment. The most frequently hired civil service (general schedule) entry-level positions are: Correctional Officer (GS-5/6), Accountant (GS-5/7/9), Chaplain (GS-12), Clinical Psychologist (GS-11/12/13), Counseling Psychologist (GS-11/12/13), Correctional Treatment Specialist/Drug Treatment Specialist (GS-11), Education Specialist (GS-5/7/9/11), Medical

Officer (GS-11 through 15), Physician Assistant (GS-7/9/11), Nurse (GS-7/9/11), Recreation Specialist (GS-5/7/9), Safety Specialist (GS-5/7/9/11), and Training Instructor (GS-5-7-9-11) (Bureau of Prisons, 2001).

To qualify as a GS-5 entry level correctional officer, a bachelor's degree, or 3 years of full-time professional experience is required. To qualify for a GS-7 correctional officer appointment, at least 9 hours of graduate study from an accredited graduate school in the field of Criminal Justice, Criminology, Social Science, or law, or the equivalent experience in corrections, law enforcement, park ranger, or mental health work is required (Bureau of Prisons, 2001).

Accountants must have a college degree with 24 hours of college credit in accounting and auditing. Chaplains are required to have at least a Master's degree in Divinity or equivalent. Clinical and counseling psychologists must have a Ph.D. or Psy.D, and have completed an APA-approved clinical internship. Education specialists are required to have a college degree in teaching for the GS-5 level. Physicians must have completed their medical training, received an M.D. or D.O. degree, and have completed at least 1 year of a supervised residency. Correctional Treatment Specialists, Drug Treatment Specialists, Recreation Specialists, and Safety Specialists must have either a college degree in a related field or the equivalent field experience (Bureau of Prisons, 2001).

Wage grade positions are also filled on a competitive basis within the community where the prison is located. These positions often have higher pay than one would expect because of the "prevailing wage" scale used for these positions. In high cost living areas, (e.g., the San

Francisco Bay Area), a cook foreman could possibly earn more money than the chief executive officer of the institutions (Warden, GS-15). Wage grade positions include air conditioning equipment mechanic (HVAC), automotive mechanic, carpenter, cook foreman, electrician, fabric worker, maintenance mechanic, painter, plumber, sheet metal mechanic, upholsterer, utility systems repairperson/operator (Bureau of Prisons, 2001).

Job Satisfaction

Employee job satisfaction in the Bureau of Prisons has been studied by race, gender, and correctional officer status. Black and white staff and Hispanic and non-Hispanic staff did not differ in their job satisfaction or their opinions regarding supervision. Blacks reported more positive attitudes toward inmates than do whites (Wright & Saylor, 1992).

Female federal correctional staff have reported lower perceptions of personal safety male federal correctional workers; in the same study, male federal correctional workers reported higher perceptions of danger than female respondents (Wright & Saylor, 1991).

Correctional officers, who have more frequent contacts with inmates, have been found to have lower opinions of the work environment of federal prisons than individuals who have supervisory responsibilities and few contacts with inmates (Saylor & Wright, 1992).

The Federal Prison Population

For the time frame of this study, 1998-1999, the BOP had custody of approximately 130,772 federal prisoners in 94 federal correctional facilities. The total population included all inmates in BOP custody: those in BOP facilities and those in contract facilities. Approximately 29,518 (27%) federal prisoners were housed in minimum security prisons, 25,715 (23.5%) were housed in medium security prisons, and 14,437 (13.1%) were housed in high security facilities. Additional inmates were not assigned a security level, primarily because they were pre-trial (unsentenced offenders). Approximately 121,002 (92.5%) federal prisoners were male; 9,770 (7.5%) were female. About 75,843 (58%) federal prisoners were white or Hispanic, about 50,609 (38.7%) were African American, about 2,216 (1.7%) were Asian, and 2,104 (1.6%) were Native American. Approximately 18,507 (14.2 %) federal prisoners were citizens of Mexico, 4,356 (3.3%) federal prisoners were citizens of Colombia, and 2,963 (2.3%) federal prisoners who are citizens of Cuba. Another 13,263 federal prisoners were citizens of other countries (Bureau of Prisons, 2001).

More than half (60,609, or 58.5%) of all federal prisoners were incarcerated for drug offenses. About 8,433 federal prisoners were incarcerated for bank robbery (8.1%), with another 9,338 (9.0%) serving federal sentences for federal crimes involving firearms, explosives, and arson. There were 5,393 (5.2%) federal prisoners serving time for extortion, fraud, or bribery. About 6,663 (6.4%) federal prisoners were incarcerated for immigration offenses. The BOP housed 72 federal criminals convicted of national security offenses (Bureau of Prisons, 1999)

The percentage of federal prisoners who are drug offenders has sharply increased since 1970, when the percentage of sentenced drug prisoners was 16.3%, compared to the current figure of 58.5%. Drug offenders pose higher risks for correctional workers in that they tend to

have long prison sentences, and are housed at the higher security levels. Because their sentences are so long, there are fewer incentives for these prisoners to obey BOP inmate regulations (Bureau of Prisons, 2001).

An important safeguard for federal correctional workers is the Federal Employees' Compensation Act (FECA, codified at 5 United States Code 8101, et seq. and at 20 CFR chapter 10, et seq.) The FECA provides compensation benefits to civilian employees of the United States for disability from personal injury or disease sustained while in the performance of duty. The FECA also provides for the payment of benefits to dependents if a work-related injury or disease causes an employee's death (Department of Labor, 2001).

The Federal Employees' Compensation Act (Workers' Compensation)

Introduction

Because this research examined federal workers' compensation recipients in the law enforcement community, it is important to understand the legislative and operational framework of the Office of Workers' Compensation in the Department of Labor. This section discusses the legislative history of the Federal Employees' Compensation Act, the structure of the Office of Workers' Compensation in the Department of Labor, technical definitions of federal injury and disability, and criteria for eligibility of federal workers' compensation coverage and benefits.

Legislative History

The first workers' compensation protections codified in law appeared in the Laws of Henry I, dating from 11th century England (Larson, 1982). These laws and others provided injured workers with standing to sue their employers, primarily for negligence. In nearly all cases, the laws were construed by the courts for the protection of the employer, and were rarely invoked by injured workers seeking redress. In the mid 19th century, workers' compensation reforms in Germany spread to other industrialized nations, including the United States. These reforms established a no-fault, non-adversarial process by which an injured worker could receive compensation to avoid catastrophic impact to his family.

The current Federal Employee's Compensation Act was originally enacted by Congress in 1916, and provided for compensation rates of 66.66% of the salary of the injured federal worker. The Act remained essentially unchanged until 1949, when the compensation rate was increased to 75% for injured employees with dependents. This additional benefit was to provide recognition to the greater need of the disabled employee with one or more dependents. This

change created the present two-tier federal compensation benefit structure of 66.66% and 75% of gross salary. In 1960 Congress provided for annual cost-of-living increases for federal workers' compensation recipients. Since this amendment, the Act's compensation benefit has been based on the minimum and maximum salaries of a GS-2 and a GS-15, respectively (Comptroller General, 1981). Eighty-three years after its initial passage, the Act provides medical care and/or replacement wages to more than 4,000 Bureau of Prisons employees each year at a cost of about \$24 million, with the average annual cost per case of \$6,000.

Structure of the Department of Labor, Office of Workers' Compensation

The Secretary of the Department of Labor (DOL), a political appointee and cabinet member, appoints the Director of the Division of Federal Employees' Compensation (DFEC), which in turn administers the Federal Employees' Compensation Act (FECA), otherwise known as federal workers' compensation. The Director of DFEC has authority over the operations of the twelve district offices. Each of these offices has a District Director, who has overall responsibility for office functions. In each District Office there are Supervisory Claims Examiners, who are responsible for the operations of claims units, as well as other Senior Claims Examiners and Claims Examiners, who have primary responsibility for handling individual claims.

The twelve district offices are located in: Boston, Massachusetts; New York City, New York; Philadelphia, Pennsylvania; Jacksonville, Florida; Cleveland, Ohio; Chicago, Illinois; Kansas City, Missouri; Denver, Colorado; San Francisco, California; Dallas, Texas; Seattle, Washington; and Washington, D.C. A map reflecting the jurisdiction of the District Offices appears in the Appendix.

Traumatic Injuries, Occupational Diseases, Recurrences, and Death

FECA is the source of entitlement to compensation and medical benefits for Federal law enforcement officers who have incurred on-the-job injuries, diseases, or death. The statute classifies workers compensation claims into four major areas: traumatic injury, occupational disease, recurrences, and death (Department of Labor, 1999).

Traumatic injury is defined as a wound or other body condition caused by an external force, including acute physical or psychological stress or strain. The injury is required to be identifiable by time and place of occurrence and part of the body affected, and must be caused by a specific event or incident or series of events within a single day or work shift. A CA-1 form (see Appendix) is completed by the employee, and authorization to obtain medical treatment is provided by the institution safety manager (Bureau of Prisons, 1998). If the employee incurs medical expense or loses time from work beyond the date of injury, then the safety manager submits Form CA-1 to the District Office of Workers' Compensation (OWCP) office within 10 days of the injury. If no medical expense is incurred and no time will be lost from the date of injury, then the notice of injury (Form CA-1) is retained in the Employee Medical Folder (Department of Labor, 1999).

In contrast to a traumatic injury, an occupational disease is defined by the Department of Labor as a condition produced by the work environment over a period of longer than one work day or shift. An occupational disease could result from systemic infection, repeated physical or psychological stress or strain, exposure to toxins, poisons, or fumes, or other continuing conditions of the work environment. The injured employee, or someone acting on his/her behalf, gives notice of occupational disease by submitting a Form CA-2 to the supervisor (see Appendix

for Form CA-2). As opposed to claims for traumatic injury, medical treatment is not presumptively authorized by the institution Safety Manager. Authorization for medical treatment is not usually provided by the OWCP until the CA-2 claim has been accepted. The employee is entitled to use sick or annual leave, or leave without pay, pending OWCP's evaluation of the claim (Department of Labor, 1999).

Workers' Compensation Coverage and Benefits

To determine if the employee was in the performance of duty when the claim arose, the site when the claim took place, as well as time of day and purpose of the employee's actions are evaluated. If an employee who is injured is on agency premises during working hours, then he/she is entitled to FECA protection if engaging in activity reasonably associated with the employment. This coverage extends to in-house dining facilities, and the premises immediately outside the building, such as steps or sidewalks, if federally maintained. The agency's premises include the parking facilities it owns, controls, or manages. Injuries incurred in agency housing provided for staff are covered if the injury takes place during the reasonable use of the premises which they are required or expected to occupy (Department of Labor, 1999).

Coverage is extended to workers sent on errands or special missions and workers who perform services at home. Employees do not have the protection of the FECA when injured en route between work and home, except where the agency furnishes transportation to and from work, the employee is required to travel during an emergency, or if the employee is required to use his or her vehicle during the day. Injuries which occur during lunch hour off the premises are not ordinarily covered unless the employee is on travel status or is performing regular duties off premises. Employees on travel status (TDY) are covered 24 hours a day for all reasonable

incidents of their TDY. An employee is covered while engaged in formal recreation for which he or she is paid or is required as a part of training or assigned duties. Also covered are employees engaged in informal recreation, such as jogging, while on the agency premises (Department of Labor, 1999).

Excluded from coverage are actions involving willful misconduct, such as where an employee intentionally violates a safety rule, disobeyed orders of a supervisor, or a law. Disobedience of orders or rules voids the right to compensation only if the disobedience is deliberate and intentional as distinguished from careless and heedless. Intoxication that proximately causes the employee's injury can result in exclusion from coverage. With regard to bringing about injury or death to oneself or another, an intent to harm oneself must be established to exclude workers' compensation coverage. If the employee can be shown "not to be in full possession of their faculties" at the time of the incident, then the injury may be compensable. Therefore, suicide may be compensable if the injury and its consequences directly caused a mental disturbance or physical condition that produced a condition resulting in a compulsion to commit suicide that prevented the employee from exercising sound discretion or judgment to control that compulsion (Department of Labor, 1999).

The federal workers' compensation program for correctional staff provides workers with the protection for themselves and their families in the event they incur injury or disease in the course of their employment. The data produced by analyzing prison worker injuries provide insight as to what types of employees, by occupation and the security level of the prison they work at, are likely to be hurt on the job.

Perception of Personal Well-Being

Introduction

In this research, perception of personal well-being was hypothesized to be an indicator for vulnerability for occupational injury for federal correctional workers. As compared with the calculation of workers' compensation injuries by occupational and injury level, perception of personal well-being examined the extent to which feelings of physical discomfort (somatic complaints), depression, anxiety, anger, frustration, change in usage of alcohol and/or tobacco, and frequency of exercise were related to occupations and security level of the prison where staff are involved. Perception of personal well-being data provided an additional measure of how occupation and security level of the prison one works were related to workers' compensation injuries.

The Bureau of Prisons utilizes a written questionnaire: "The Prison Social Climate Survey" (PSCS) which is distributed to and completed by a random sample of federal field correctional workers on an annual basis. A copy of the PSCS instrument appears in the Appendix. The PSCS is administered to staff at all federal prisons to provide management with information to monitor operations, evaluate the effectiveness of policy, and assess progress in meeting strategic planning goals. The PSCS provides an opportunity for staff to convey their impressions about working and living conditions at the facility to which they are assigned. Topics covered in the survey include the care and custody of inmates, staff perception of personal well-being, staff/management communications, staff training, and the work environment. The random sample of staff is selected by the Office of Research and Evaluation in the Bureau of Prisons Central Office. The sample design reflects the proportional sampling of

the staff complement with respect to job assignment, ethnicity, gender, supervisory status, and correctional position (Bureau of Prisons Operations Memorandum, 1998).

A section entitled “perception of personal well-being” is a component of the PSCS. Perception of personal well-being is defined as a person’s subjective assessment of their mental and physical health, as reflected in questions regarding emotional and physical well-being, including behavioral medicine (somatic complaints) depression, anxiety, anger, frustration, use of alcohol and/or tobacco products, and engagement in regular physical exercise.

For distribution of the PSCS, there are three sampling rates: for prisons with a staff population of less than 106, all staff complete the PSCS. For prisons with a staff size of greater than 106 but less than 450, the sampling rate is between 99.0% to 25.0%, respectively. For prisons with more than 450 staff, 25% of the staff are sampled (Personal communication, Roxie Schoppett, 1999).

Staff complete the PSCS questionnaire voluntarily. At institutions where a random sample is taken, staff are chosen to participate in such a way as to ensure that the sample reflects the makeup of the overall staff. For example, if 43 percent of an institution’s staff complement is custody staff, then PSCS sample is drawn to ensure that 43 percent of the staff sampled are custody staff.

Each federal correctional facility conducts a staff recall to distribute the PSCS, including time for completion and collection. While completion of the PSCS is voluntary, staff are encouraged by the institution executive staff to respond to the questionnaire. The survey takes about 45 minutes to complete. Individuals who need additional time to complete the survey are given the time to do so. The PSCS administrator (designated by the Warden of each federal

prison) collects and returns the completed questionnaires to a vendor contracted to compile the responses. The institution PSCS administrator returns centrally-collected questionnaires to the vendor as soon as possible after the staff recall via overnight mail. Staff who complete the PSCS outside of staff recalls may return them, sealed in the envelope, to the institution PSCS administrator for inclusion in the bulk shipments to the vendor, or may return them directly to the vendor in the pre-addressed, business reply envelope provided. Any staff who indicate that they prefer to return their completed questionnaire to the vendor directly may do so using the pre-addressed, business reply envelope provided. Individual responses are confidential. Data are analyzed and only group responses are reported; there are no reports of individual responses. Reports based on survey results do not identify respondents in any way. Supervisors are not informed of who did or did not participate in responding to the PSCS (Bureau of Prisons Operations Memorandum, 1998).

The Bureau of Prisons' Perception of Personal Well-Being Measurement

The personal well-being section asks 25 questions about physical and emotional well-being, the consumption of tobacco and alcohol, and exercise. Staff are asked to indicate the extent to which they agree with the statements included in the 25 items. Answer bubbles range from 1 (strongly agree) to 7 (strongly disagree) and are provided on a computer-ready answer sheet. The Perception of Personal Well-Being Measurement was developed by the Bureau of Prisons' Office of Research Evaluation, and largely extrapolated from the MacMillan Health Opinion Survey Index (1957), and a successive series of measures based on MacMillan's work, including the Langner Mental Health Index (Srole, et al., 1973; Vogt, et al., 1994).

MacMillan drew as its core questions from the Army Neuropsychiatric Adjunct with

additional questions found to be useful neurotic discriminators by Eysenck, Rimoldi, and others (Spiro, et al., 1972). At the time the test was developed, the Department of Psychiatry of Johns Hopkins University Hospital had been providing comprehensive psychiatric services through Blue Cross and Blue Shield to United Auto Worker (UAW) members employed at the General Motors Plant in the Baltimore metropolitan area. A research program was undertaken to examine the prevalence of mental illness in this population. The measured group consisted of 1026 workers and their families. The sample was representative of a population of 8,000 UAW workers and their spouses, including 30 UAW members or their spouses who were active patients in the UAW outpatient clinic during the 3 month period of the field survey. Both patients and sample members were of the same social class, lived in the same residential areas, and did not differ significantly in annual family income. Neither respondents nor interviewers were aware of any special reason for inclusion in the study. A completion and return rate of 87% was achieved (888 subjects) (Spiro, 1972). When the responses of the patient group were compared to those of the 88 sample population, the instrument discriminated between them sharply and significantly ($p<0.0001$) (Spiro, et al., 1972).

Langner's Mental Health Index, building upon MacMillan's work, was developed as a model to examine the relationship of psychological distress to mortality risk (Vogt, et al., 1994). Approximately 2,500 adult members of the Northwest Region of Kaiser Permanente were recruited as subjects to complete the Langner Mental Health Index. A high score on the Langner Index was related to an increased risk of both functional gastrointestinal and hyperimmune diseases. Younger individuals with a low mental health score were at increased risk for hypertension, whereas older persons with a low mental health score were at reduced risk (Vogt, et al., 1994).

Behavioral medicine (somatic complaint) questions used the same question and answer format. Staff members were asked: During the past 6 months, how often have you had: recurring backaches; a poor appetite; a disturbed or restless sleep; a concern that something is wrong with your body; a stomach problem related to digestion; muscle aches; back problems (for example, lower back pain, muscle pain); and, a feeling of being weak all over.

For the depression grouping of questions, staff members are asked: During the past 6 months, how often have you had: a feeling of worthlessness; a feeling of depression; a feeling that nothing turns out right for you; wondering if anything is worthwhile; and, a feeling that everything is going wrong.

Questions measuring anxiety use an identical format. The following questions are included: During the past 6 months, how often have you had: a concern that something is wrong with your body; a feeling of tenseness or anxiety; a difficulty in concentrating; a feeling that you are worrying too much; personal worries that bothered you; a feeling of worry about your family; and a feeling or worry about money problems. A single question regarding frustration used the identical question and answering format. Staff members were asked: During the past 6 months, how often have you had: a feeling of frustration by your job? Regarding anger, the following question was asked: During the past 6 months, how often have you had a feeling of being very angry?

For tobacco and alcohol consumption, the following questions are asked for each substance: On a scale of 1 (not applicable) to 6 (increased a great deal), has your consumption of tobacco/alcohol changed? And finally, the exercise question asks staff members if they have

engaged in any exercise at all in the past six months (yes/no answer).

In all, twenty-five questions are asked regarding self-report measures of behavioral medicine (somatic complaints), depression, anxiety, frustration, anger, alcohol and tobacco consumption, and whether any exercise had been engaged in during the past 6 months.

These measures allow an examination of the perceived sense of physical and emotional well-being of various categories of staff members included in the PSCS survey. If heightened scores in any of the well-being categories corresponded to the incidence and prevalence of workers' compensation injuries at the federal prisons, this will be an important indicator to validate the hypothesis that perception of personal well-being and occupational injuries are related.

Cronbach's alpha scores were computed for each of the multi-question subscales. For the behavioral medicine (somatic complaint) subscale, the alpha value was 0.85. For the depression subscale, the alpha value was 0.92. For the anxiety subscale, the alpha value was 0.86. Values were not measured for remaining subscales as they each consisted of a single question.

HYPOTHESES

Regarding **workers' compensation injuries** in the Federal Bureau of Prisons, it was hypothesized that:

Hypothesis 1: Rates of workers' compensation injuries per 100 workers are significantly higher at high security federal prisons than at low security federal prisons.

Rationale: Security levels reflect the likelihood of escape, violence, and difficulty of a federal prisoner. Although no current analysis of the relationship between staff injuries and security level of federal prison exist, it is widely believed among prison employees that higher security prisons are more likely to result in a federal correctional worker being injured than low security institutions.

Hypothesis 2: Rates of workers' compensation injuries per 100 workers are significantly higher for correctional officers than for other occupations at all security levels of federal prisons.

Rationale: Although an analysis of occupational incidence of workers' compensation injuries has not been performed, it is widely accepted among federal correctional employees that correctional officers are the “front-line” contacts with federal prisoners, and are at highest risk for physical encounters with violent or recalcitrant prisoners.

Regarding **perception of personal well-being**, it was hypothesized that:

Hypothesis 3: As security level increases, the overall institution score for the Perception of Personal Well-Being will decrease.

Rationale: As with Hypothesis 1, higher security level prisons are associated with housing prisoners with an increased risk of violence, escape risk, and difficulty. Daily exposure to the stressors of this work environment is more likely to result in a reduced Perception of Personal Well-Being for workers at higher security institutions as compared to workers at lower security institutions.

Hypothesis 4: Correctional officers will have significantly lower scores for Perception of Personal Well-Being than all other occupational categories in the Bureau of Prisons.

Rationale: Correctional officers are exposed to chronic levels of adversity with federal prisoners more than any other occupational group in the federal prison. This chronic job strain will result in lower scores for Perception of Personal Well-Being.

Regarding the relationship between **workers' compensation injuries and Perception of Personal Well-Being**, it was hypothesized that:

Hypothesis 5: Security level of the correctional facility will have a direct relationship to rate of correctional worker injuries. Low security prisons will have higher scores for Perception of Personal Well-Being, and will have fewer per capita workers' compensation injuries than federal prisons with lower scores for Perception of Personal Well-Being.

Rationale: Increased health risks and are associated with accumulated environmental exposure of emotionally and physically wearing job environments, Dollard and Winefield (1995, 1998). Increased on-the-job errors are associated with chronic levels of stress, Jones and colleagues (1988). There is a tendency of workers' compensation claimants to convert psychological distress into physical complaints (Gandolfo, 1995).

METHODS

Overview

This research examined the perception of personal well-being and workers' compensation injuries among federal correctional workers. This study analyzed general and specific components of workers' compensation data, beyond aggregate annual cost calculations. Occupational injuries for federal correctional workers were examined by federal prison security level to which the employee was assigned when the injury took place, and the occupational categories of injured workers. These workers' compensation injury figures provide some insight regarding patterns and risk factors of on-the-job injuries for correctional staff of varying occupations at federal prisons across the United States.

Workers' compensation data are collected by the Safety Manager at each federal prison. For this dissertation, Safety Managers provided information for every new claim of traumatic injury or occupational disease from July, 1998, to June, 1999. The type of injury, the length of time the employee was absent from work, and the occupational category employee of the employee were provided from each federal prison.

The Perception of Personal Well-Being (PWB) is a portion of the Prison Social Climate Survey (PSCS), a written questionnaire completed by about 4,086 federal correctional staff (total agency staff = 28,683). The PSCS provides an opportunity for staff to convey their impressions about working and living conditions at the facility to which they are assigned. The PWB is a subjective self-assessment of physical and mental health, as measured in the aggregate domains of anxiety, depression, somatic complaints, appraisal of job satisfaction, anger, use of alcohol and/or tobacco products, and engagement in physical exercise. Distribution of the instrument is determined by a random sample that assures proportional sampling of the staff

complement with respect to job assignment, ethnicity, gender, supervisory status, and correctional position.

Responses to these questions are computed by prison security level, with a notation of the occupational classification of the employee, (e.g., correctional officer or non-correctional officer). Analysis of these factors associated with federal correctional work quantifies how these two different groups of individuals perceive their emotional and physical health, depending on the influence of the independent variables. When these data are analyzed with workers' compensation injury data, a more complete explanation for patterns and risk factors of on-the-job injuries for male and female correctional workers at federal prisons appears.

Workers' compensation injury data were analyzed with the PSCS/PWB questionnaire results to determine the extent of relationship between self-assessment of aggregate mental and physical health, work environment, social support and incidence and prevalence of workers' compensation injuries by security level of the institution assigned to, gender, age, and occupation.

Subjects

In 1998, when the PSCS data were collected, there were 28,683 federal correctional workers assigned to federal prisons throughout the United States. Of these staff, 72.9% were male and 27.1% were female. The mean age was 37.6, and the median age 37.4. About 66.3% of staff were White, 20.1% of staff were Black, 10.2% were Hispanic, 1.8% were Asian, and 1.5% were American Indian. Slightly more than one-third (34.6%) had a high school diploma, 4.3% had technical training, 31.2% had some college, 19.2% had a bachelor's degree, 2.5% had some graduate work, 4.8% had a master's degree, 1.7% had a Ph.D. degree, and 1.8% had an advanced professional degree.

From this population of 28,683 field correctional staff, 4,645 staff were surveyed with the PSCS/PWB. There was a response rate of 4,086 (88%). The demographics of the respondents were: 73.1% male, 25.6% female, and 1.3% did not indicate their gender. About 69% were white, 17.7% Black, 1.7% Native American, 1.7% Asian/Pacific Islander, 0.4% Eskimo or Aleut, and 7.4% “other.” Approximately 12.1% of the respondents identified themselves as Hispanic, and 87.2% as non-Hispanic. The median age was 36.

Thomas R. Kane, BOP Assistant Director for the Information, Policy, and Public Affairs Division, and Newton E. Kendig, M.D., BOP Medical Director approved this research proposal. No identifiers were used that would indicate individual information for any BOP employee. In addition, this proposal was approved by for the USUHS IRB. The authorizing documents appear in the Appendix.

Independent Variables

The independent variables were: security level of the institution, occupational category, region, and gender. Security levels range from minimum (federal prison camps) to high (metropolitan correctional centers, penitentiaries, and administrative “super-maximum” facilities). Occupational category was divided into correctional officers and non-correctional officers. Regional categories were divided among the six regions within the BOP. Gender was simply male and female federal correctional workers.

Security level of the institution was chosen because the differences in worklife between the different groups greatly differ. Staff working in penitentiaries, for example, work with an inmate with a much higher risk for violence, escape risk, and difficulty than inmates in federal

prison camps, who are more likely to have shorter sentences, convictions for non-violent crimes, and by nature of their briefer periods of incarceration, an incentive to comply with prison regulations. For example, an inmate with a 75-year sentence for drug trafficking, without possibility of parole, has far fewer incentives to cooperate with prison staff and regulations than does a securities attorney with a “year and a day” sentence to serve for obstruction of justice.

Occupational category is an independent variable because the job one has in a prison setting determines to a great extent the nature of the demands of working in a federal prison. Correctional officers have the most direct contact with inmates, and the interaction between correctional officer and prisoner can quickly escalate into volatility. Non-correctional staff, for example health services staff, in contrast, are perceived by many federal prisoners to be objective advocates, with exclusive authority to provide treatment for a physical ailment and to provide excused absence from mandatory work details. Staff assigned to the Federal Prison Industries (UNICOR) work side-by-side with federal prisoners, supervising the construction of furniture, fabric and textile production, defense contracting, data processing, and other work in a factory setting. The Warden and his/her staff have administrative responsibility over a self-contained community with requirements for security, health, housing, feeding, clothing, and program needs for a wide variety of federal prisoners. It was expected that significant differences would be reflected between the correctional officer and non-correctional officer categories with regard to worker injuries and perceptions of personal well-being.

The most significant differences between federal prison employees pertains to their relationship with inmates: correctional officers have an inherently adversarial relationship with inmates, and non-correctional officers provide services (e.g. health services, education, religious,

food service) on behalf of the inmates. This occupational division is the major distinction dividing Bureau of Prisons employees. Whether an employee is a teacher or a pharmacist has less likelihood to determine their relationship with the inmate population than if the employee is a correctional officer. This reasoning provided the basis for the decision to divide the occupational categories into two groups, correctional officers and non-correctional officers.

Dependent variables

For workers' compensation data, the following dependent variables were utilized for each security level of the federal prison system: number of injuries in which a Notice of Traumatic Injury or Occupational Disease was filed by injured workers by security level of the federal prison they work at, and the occupational category of the injured worker.

The number of new injuries in which a Notice of Injury or Occupational Disease was filed reflects the number of workers' compensation claims that were filed during the study's time frame for each security level, with rates expressed as rate of claims filed per 100 workers per year. The occupational categories indicate the extent to which particular occupations, e.g., correctional officers or non-correctional officers, were injured at work. For perception of personal well-being data, data reflecting the overall score on the measure of PWB were analyzed, as well as responses on subscale areas.

These PWB subscale were chosen because they reflect the aggregate physical and emotional self-report measures of each federal correctional worker responding to this portion of the PSCS. The components of the PWB measure reflect an individual's cognitive and physical well-being, and are an indicator of the extent to which they are affected by occupational stressors associated with working in a federal prison.

Data Collection Procedure

Data were collected from the following sources: the results of the BOP PSCS/PWB survey questionnaires, and injury reports from Safety Managers at each of the federal correctional institutions within the BOP.

Perception of personal well-being is reflected in the individual's subjective assessment of their mental and physical health. The personal well-being section of the PSCS asks 25 questions about physical and emotional well-being, the consumption of tobacco and alcohol, and exercise. For each question, staff are asked to indicate the extent to which they agree to a statement. Answer bubbles range from 1 (strongly agree) to 7 (strongly disagree), and are provided on a computer-ready answer sheet to record the staff member's response. Results from the PWB/PSCS survey were converted to the Statistical Program for Social Scientists (SPSS), version 10, for data analysis.

Safety Managers at each federal prison provided information reflecting the case number of each injured worker, their institution, occupational classification, and the nature of their injury during the time frame of the study. These reports were sent to the author in the capacity of his assignment as Workers' Compensation Coordinator in the Safety Branch of the Health Services Division in the Central Office of the Federal Bureau of Prisons. Data were entered in the SPSS statistical packages format for analysis.

Data Analytic Strategy

The two study endpoints examined were perception of personal well-being (PWB) and staff injuries. These two endpoints were analyzed separately, as the information for these two outcomes was from separate data sets. These sets cannot be linked at the individual level

because there were no personal identifiers (e.g., Social Security numbers) in the PWB data. The PWB survey was conducted on a subset of the population, whereas injury data consisted of reports of all injuries among the entire prison staff over the study period.

The mean score of the PWB questionnaire were computed, as well as responses to the subscale questions. These scores were used as the dependent variables in ANOVA models, as discussed below. The data set analysis consisted of one record per survey respondent, including the scale score, with occupational status, security level, region, and gender.

The number of staff injuries data was determined by computing the number of CA-1 and CA-2 claims filed at each prison institution. The data set that was analyzed consisted of one record per injured worker, including the days of continuation of pay used after the injury, occupation (correctional officer or non-correctional officer), security level, region, and gender. The number of continuation of pay days was the dependent variable in Poisson regression, as discussed further below.

Perception of Well-Being Analyses: The PWB data were examined using a three-way ANOVA. The responses were categorized according to the levels of the independent variables: gender, security levels, region, and occupation (correctional officer/non-correctional officer). ANOVA was used to determine the influence of the independent variables, if any, on the scale scores. In this technique, factor effect is deemed to be present when the variability among scores within the cells was small relative to the amount of variability between the different cells. When the scores within the worker categories were basically heterogeneous, with clear distinctions between the categories, then the scores were determined to differ according to worker categories. Aggregate scores of the PWB were initially analyzed, followed by an analysis of each of the PWB subscales.

A factorial model was used to consider any possible interaction effects. If none of the interactions was significant, then a main effects model was to be used. Factors showing significant effects were be further examined for any pairwise significant differences between levels. Tukey's HSD were used for post-hoc analyses. Determination of main effect and interaction significance were determined by standard F tests.

Injury analyses: The relation between the likelihood of injury and the explanatory factors was examined by logistic regression. The model was: $\log(p/1-p) = \alpha + \beta_1(\text{security level}) + \beta_2(\text{gender}) + \beta_3(\text{region}) + \beta_4(\text{occupation})$, where p is the probably of the response of having an injury. The stepwise logistic regression model is best used for modeling categorical outcomes, especially those with only two possible outcomes such as “injured” or “not injured”. A stepwise logistic regression model was chosen over the hierarchical regression model because no synergistic effects were expected (Powers, 2001).

This model gives rise to the odds ratio, a widely used measure of the relationship between two dichotomous variables. It is defined as the ratio of the odds of an event for those in one group to the odds for those in the other group. For a continuous risk factor, the odds ratio is obtained from logistic regression by exponentiating the value of the parameter associated with the risk factor. In such a case, the odds ratio can be interpreted as the change in the odds for any increase of one unit in the corresponding risk factor. Tests for significance of the explanatory variables consisted of testing their respective regression coefficients for difference from zero, i.e., the explanatory variable has no effect on the likelihood of injury. These tests were performed by standard chi-square analyses. For those factors found to be significant, the odds ratios comparing various levels of the factor were examined. Based on 95% confidence limits, those odds ratios significantly different from 1.0 were determined to be statistically significant.

Analysis of COP days: The relationship between COP days and the explanatory factors were examined by Poisson regression, utilizing the following model: $\log \mu = \alpha + \beta_1$ (security level) + β_2 (gender) + β_3 (region) + β_4 (occupation), where μ is the expected value of COP days, α is the intercept parameter (estimated), and β_1 through β_4 are the estimated coefficients on the independent variables (security level, gender, occupation and region). Poisson regression is commonly used to model outcomes involving counts of occurrences (Powers, 2001).

Tests for significance of the explanatory variables consisted of testing their respective regression coefficients for difference from zero. These tests were performed by standard chi-square tests of the regression coefficients. For those factors found to be significant, the ratio of predicted mean number of COP days at each level versus each of the others were computed from the parameter estimates. Tests of significance of these ratios were be performed by examining their 95% confidence levels. If 1.0 is not contained within the range of the confidence limits, then the ratio was determined to be statistically significant.

RESULTS AND CONFIRMATION/REJECTION OF HYPOTHESES

This dissertation examined the relationship between perception of personal well-being and federal correctional worker injuries. The results for each category are be presented, followed by the interaction between the two measures.

Perception of Personal Well-Being: Table 1 presents the relationship between aggregate perception of personal well-being and gender, region, security level and occupation. For perception of personal well-being, security level was not a significant predictor of aggregate scores on the PWB portion of the Prison Social Climate Survey, $p = 0.31$ [$F(5,3901) = 1.18$]. Occupational category, i.e. correctional officers vs. non-correctional officers, was a significant predictor of aggregate score on the PWB portion of the Prison Social Climate Survey, $p = 0.0001$ [$F(1,3905) = 21.65$].

Table 2 presents the relationship between the subscales of the PWB and security level and occupation. For all of the eight PWB components (behavioral medicine, depression, anxiety, anger, frustration, change in tobacco usage, change in alcohol usage, and frequency of exercise), neither security level nor region was a significant predictor of mean score in the realm of the respective component. Occupational category and gender were significant predictors of mean scores for the PWB components of behavioral medicine (somatic complaints), anxiety, and frequency of exercise. Occupational category, but not gender, was a significant predictor of depression and frustration.

Correctional officers were less likely to experience physical ailments, less depressed, less anxious, more angry, less frustrated, and more likely to exercise than non-correctional officers. Male staff were less likely to experience physical ailments, less anxious, more angry, and more

likely to exercise regularly than female staff.

Occupational injuries: Table 3 presents injury rates per 100 staff and mean continuation of pay rates. Male staff had higher injury rates than females. Correctional officers had higher rates of injury than non-correctional officers. Female correctional officers had higher rates of injury than male correctional officers, while male non-correctional officers had higher rates of injury than female non-correctional officers. Minimum security level staff had significantly fewer rates of injury than all other security levels. The North Central Region had higher injury rates than all other regions. Continuation of pay days taken after an injury were comparable for male and female staff. Correctional officers had a higher number of mean continuation of pay days after an injury than non-correctional officers. For correctional staff, females had a higher mean number of continuation of pay days than male staff; for non-correctional staff, males had a higher mean number of continuation of pay days than female staff. The North Central Region had a lower number of mean continuation of pay days than any other region. The Administrative Maximum security level had a higher mean continuation of pay days than all other security levels.

Table 4 presents odds ratios for federal correctional worker injuries. Female staff had a lower odds ratio for the occurrence of injuries than male staff. Correctional officers had a higher odds ratio for injury than non-correctional staff. The North Central Region had a higher odds ratio for injury occurrence than all other regions. The Minimum security level had a lower odds ratio for injury than all other security levels, with the exception of the AdMax security level.

Table 5 presents the mean ratio of continuation of pay days after an injury. Female staff had a lower mean ratio of continuation of pay days than male staff. Correctional officers had a

higher mean ratio of continuation of pay days than non-correctional officers. The North Central Region had a lower mean ratio for continuation of pay days than all other regions. The AdMax security level had a higher mean ratio for continuation of pay days than all other regions.

Interaction between Perception of Personal Well-Being and Occupational Injuries by Security Level:

by Security Level: To analyze the interaction, if any, between PWB and occupational injuries, it was hypothesized that correctional institutions with lower security levels would have higher levels of PWB than higher security institutions. Surprisingly, there were no significant differences among the security levels for perception of personal well-being, thereby rendering any significant relationship with security level rates of worker injuries not possible.

Additional Variables Examined: Table 4 presents odds ratios for injury occurrence among the six different regions of the Federal Bureau of Prisons. As indicated earlier, there were no significant differences among the six regions in measures of perception of personal well-being. However, the North Central region had a significantly greater odds ratio of staff filing notice of injury claims than any other region.

Region was a significant predictor in the number of continuation of pay days would be taken by federal correctional staff after an injury; staff in the North Central region had significantly lower odds for taking continuation of pay days after an injury than all other regions.

Table 3 presents odds ratios for continuation of pay days taken after an injury by region.

Gender was a significant predictor of injuries in federal correctional workers in that female correctional officers had a significantly higher likelihood of injuries than male correctional officers. Interestingly, among non-correctional officer staff, males had higher rates of injury than females, 8.3 per capita vs. 7.0 per capita, respectively. Among non-correctional

officers, male staff also had a greater likelihood of taking more continuation of pay days after an injury than their female peers, 6.3 vs. 6.1, respectively. Table 3 present rates for injury claims and continuation of pay days between male and female correctional staff.

Correctional officers were also more likely to take more days off of work than non-correctional officers after an occupational injury. Female correctional officers had higher rates of per capita days off than male correctional officers after an occupational injury, 8.6 vs. 7.0. Table 3 reflects the per capita rates for continuation of pay days off after an occupational injury.

Within perception of personal well-being, gender and occupation were significant indicators of overall personal well-being (females had lower perception of personal well-being than males among correctional officers and non-correctional officers.) Correctional officers had higher aggregate scores of perception of personal well-being than non-correctional officers. There were no significant differences among region or security level for aggregate scores of perception of personal well-being.

When the components of the PWB scale were analyzed, five of the eight components contained occupational differences: correctional officers were less likely to experience physical ailments, less depressed, less anxious, less angry, and were less frustrated. There were no significant differences for security level or regions for any of the eight components of the PWB scale.

Confirmation and rejection of hypotheses:

Regarding **workers' compensation injuries** in the Federal Bureau of Prisons:

Hypothesis 1: Rates of workers' compensation injuries per 100 workers are highest at high security federal prisons and lowest at low security federal prisons.

Partially true. Security level was a significant predictor of injuries, see Table 3.

Correctional workers at Minimum security institutions had lower odds for the occurrence of occupational injuries than all other security levels with the exception of the AdMax security level, for whom differences were not significant. Correctional workers at Low security institutions had significantly higher likelihood of injuries than all security levels, with the exception of Administrative security correctional workers, for whom differences were not significant.

Hypothesis 2: Correctional officers had higher rates of workers' compensation injuries than non-correctional officers.

True. Occupation was a significant predictor of injuries, see Table 3.

Regarding **perception of personal well-being**:

Hypothesis 3: Aggregate perception of personal well-being scores will be lowest at high security federal prisons and highest at low security federal prisons. Component scores of the PWB will be lowest at high security federal prisons and highest at low security federal prisons.

False. Security level was not a significant predictor for aggregate perception of well-being, see Table 1. Security level was not a significant for subscale scores of the PWB, see Table 1.

Hypothesis 4: Correctional officers will have lower rates for perception of personal well-being than non-correctional officers.

False. Correctional officers had a higher perception of personal well-being than non-correctional officers based upon aggregate scores on the PWB, as shown in Table 1. When components of the PWB were analyzed, correctional officers had lower mean scores for somatic complaints, depression, anxiety, anger, and frustration, in the past six months, as shown in Table 2.

Regarding the relationship between **workers' compensation injuries and perception of personal well-being:**

False. There were no significant differences among the security levels for perception of personal well-being, thereby rendering any significant relationship with security level occupational rates of injury not possible.

DISCUSSION

Working in a prison is among the most dangerous assignments within the federal civil service community (U.S. Department of Labor, 1999). Federal correctional workers perform their jobs under the constant threat of danger to their personal safety from convicted federal prisoners. To gain an increased understanding of the nature of injuries incurred in the federal correctional community, this dissertation examined worker injuries by occupational and security level, as well as self-reports of perception of personal well-being, for over 4,000 prison staff. Federal employees injured on the job are entitled to 45 days of continuation of pay (COP) (U.S. Department of Labor, 1999). Within the framework of workers' compensation injuries, the number of COP days taken by injured federal correctional workers also was analyzed, with a focus on differences between COP days taken by security level, correctional officer status, region, and gender.

This research is the first study to examine injury data and COP days for the federal correctional workforce. It is also the first to analyze perception of personal well-being data for federal correctional workers. The exploration of the relationship of self-report measures of perception of well-being and rates of injuries among federal correctional workers provides a first-time opportunity to identify variables indicating susceptibility to injury in the federal correctional workforce.

The hypotheses were grouped into three major themes: (i) security level; (ii) occupation; and (iii) gender.

Security Level: The hypothesis that security level was a significant predictor of injuries was confirmed for minimum security institutions. Because minimum security prison institutions

are prison camps, and are populated with inmates with the lowest risk to society in terms of flight risk and dangerousness of crime, it was expected that worker injuries would be less in these institutions than those at higher security levels. This finding was consistent with the expectations of widely accepted Bureau of Prisons conventional thought. In contrast, it was quite surprising that the injury rates at the minimum and maximum security levels did not differ significantly.

The finding that low security institutions had higher rates of worker injuries all other security levels, except for Administrative level prisons, was unexpected. Conventional wisdom among Bureau of Prisons staff is that working in a low security environment would not pose a greater exposure to dangerousness in terms of safe work environment than higher security levels, especially the medium, high, and supermax levels. It is possible that the very environment that characterizes higher security correctional facilities, (i.e. inmates with a higher risk of escape and danger to society), could actually contribute to a work environment that is safer than expected.

Restrictions on inmates' choices progress as security level increases. Higher security inmates have much more structured schedules, and far fewer interactions with staff regarding optional behavior than do inmates at lower security levels. For example, at the U.S. Penitentiary in Marion, Illinois, nearly all of the inmates are on "lockdown" status 23 hours per day. These high security inmates are released from their cells, on a rotating basis, for one hour per day for physical recreation and to shower. Inmate interactions with non-correctional officer staff are far less than at lower security level institutions. The highly structured nature of work in penitentiaries and other higher security level institutions provides less decision-making on the part of the staff, and fewer opportunities for inmates to "con" or manipulate staff. The data reflecting lower rates of injury at higher security level institutions compared to low security level

institutions may indicate that less decision-making on the part of correctional staff may act as a partial immunity for staff in terms of reported injuries. Correctional officers at higher security institutions are believed by many to have higher status and respect than their correctional officer counterparts at lower security institutions. The combination of high status and decision latitude combined with fewer choices to be made would be a credible explanation for their higher perception of personal well-being (Bourbonnais, et al., 1996; Landsbergis, et al., 1995).

The finding that security level of the institution was not a significant predictor of perception of well-being was unexpected. Self-report measures of physical and emotional well-being do not appear to significantly differ whether staff are assigned to minimum or supermax security level institutions. This finding is important because it is also contrary to many widely-held beliefs among federal correctional workers. It is thought by many that the environmental stressors of working in a prison camp would be manifested much differently on the perception of well-being scale than those present in a high security prison. Federal correctional workers assigned to high security institutions are expected by many Bureau of Prisons staff to have a greater exposure to factors that would decrease quality of life as reflected in perception of personal well-being. That the differences between lowest and highest security levels are insignificant indicates that all prison institutions have an equivalent level of perception of well-being regardless of security level, or that prison workers are consistent in their self-report of well-being, regardless of the environment they experience. A generally held viewpoint of federal correctional workers is "...don't complain, don't explain"; this reluctance to communicate difficulty with well-being issues could possibly explain the absence of significant differences among perception of personal well-being among federal correctional workers at different security levels.

Security level was a significant predictor of injuries and COP days taken off after an injury. Federal correctional workers at minimum security level prison camps had a significantly lower likelihood for rates of injury than higher security levels, with the significant exception of having non-significant differences with the AdMax (maximum) security level; correctional staff at the high security level had a significantly higher likelihood of taking fewer COP days after being injured at work. The Admax security level had a significantly higher likelihood of taking more COP days after an injury than their peers assigned to other security levels. The findings of lowest rates of injuries at minimum security prison camps is consistent with expectations that prison camps would have lower rates of worker injuries, and that the supermax level would have greater number of COP days taken to recover from an on-the-job injury. An unexpected finding discussed earlier were the lower rates of COP days taken after an injury at penitentiaries, and the comparatively low rates of injuries at the AdMax institution. The nature of the work at an AdMax institution may alter the perception of AdMax employees as to what actually constitutes an occupational injury or disease. These data underscore the need to compare rates over a period of years to determine consistency over time. The rate of worker injuries at the low security level was higher than all other security levels, with the exception of the Administrative security level, which had the highest rate of injuries of all security levels.

Administrative security institutions accept inmates from all backgrounds. Included in this security classification are inmates at Federal Medical Centers, and inmates at Metropolitan Correctional Centers and Metropolitan Detention Centers. Working in a correctional medical environment includes the dangers of working in a hospital compounded with all patients being

federally convicted felons. Metropolitan correctional and detention facilities are urban pre-trial (jail) and immigration facilities that accept inmates around the clock, often little or no documentation of their backgrounds (making security classification and assessment of escape risk and danger difficult).

Supermax correctional staff take longer to recover from their injuries than their peers in all other security levels. There are a variety of possibilities to account for these differences, including the potential that the severity of injuries incurred by staff at the supermax level is higher than other security levels, or staff's unwillingness to return to work at the supermax security level before a complete and total recovery from their injuries. In the Bureau of Prisons culture, working at the supermax security level is perceived by many as an elite, high status position. To compete and fit in with one's peers at the institution where federal prisoners with the highest escape risk and danger to society are housed requires maximum capacity of a federal correctional worker; to return to work without a total recovery from an injury could potentially compromise the ability of the worker to perform his or her duties at the level required to work in this maximum security environment.

Occupation: As expected, occupation was a significant predictor of injuries. Correctional officers had significantly greater odds for the occurrence of occupational injuries than did non-correctional injuries. This finding reinforces the generally accepted view among federal correctional staff that the adversarial relationship between correctional workers and federal prisoners is sharpest for correctional officers. The physical nature of correctional officer work (e.g., conducting searches of prison cells, strip searches of inmates, supervising movement of inmates from one location in the prison to another, responding to institutional emergencies) is

more demanding than that of most other non-correctional officer staff.

Correctional officers have a more clearly defined adversarial role with inmates than do non-correctional workers. When an inmate disobeys a prison regulation, correctional officers will ultimately physically compel compliance if the inmate refuses the initial order. Correctional officers receive the brunt of inmate frustration and anger, in forms of physical and verbal confrontation. Correctional officers are perceived by their non-correctional officer peers as being the “backbone of the prison system,” inasmuch if the security of the institution is unstable, no other program can function safely or effectively. This status (i.e., “backbone” of the institution) provides a cohesion status among correctional officers that non-correctional officers do not have. The social support among correctional officers, and their status as correctional officers could be important factors explaining the significant differences among staff and perceptions of personal well-being and injury rates.

Social support can have a direct effect on health by promoting better health (Corneil, 1997), and lack of social support can cause ill health (Cohen & Syme, 1985). The buffering hypothesis suggests that social support intervenes between the stressor and distress to reduce its deleterious effects. Cohen and Wills (1985) found evidence for both direct effects and buffering effects. When social support was added to their job strain model, a buffering of the effects of job strain by social support was found in three of four studies on cardiovascular disease (Landsbergis, Schnall, Schwartz, Warren, & Pickering, 1995). House, Landis, and Umberson (1988) conducted a meta-analysis that indicated that individuals with lower social support levels possessed significantly higher morbidity and mortality. These analyses support the principle that social support among correctional officers provides some protection from occupational

stress, and explain the higher levels of perception of well-being among correctional officers compared to non-correctional officer staff.

Feuerstein and colleagues (1999) found that workers who “continue to work with pain to insure high quality” were at higher risk of having a workstyle resulting in increased levels of pain and functional limitation. Workers who continued to expose themselves to difficult tasks when experiencing pain were more likely to experience upper extremity musculo-skeletal occupational injuries. Federal correctional officers, by reputation, are tougher and more resilient to pain than colleagues who are not correctional officers. Because correctional officers are the central lynchpin of the federal prison system (responsible for custody, orderly administration of the institution, and escape prevention), it is likely that many correctional officers perceive a duty to continue working even when injured. Unfortunately, it is this “working through pain” that may actually act to exacerbate injuries and cause more missed days from work when the pain or injury becomes impossible to work through.

Further research should examine the length of time between initiation of physical symptoms and the time that correctional officers and non-correctional officers report a work-related injury. Feuerstein and colleagues (1999) have noted that individuals who are especially goal-oriented and who are driven are more likely to try to work through pain, and are also possibly likely to ignore physical symptoms. One potential method of reducing lost days from work may be to actually encourage workers to report physical symptoms of occupational injuries early, and provide treatment before the injuries worsen.

It was expected that correctional officers would have lower scores for perception of personal well-being than non-correctional staff. It is widely accepted that correctional officers

face greater physical and psychological challenges than non-correctional staff. The unpredictable nature of these challenges are believed by many federal correctional workers to exact a toll on the quality of life for correctional officers. Therefore, the findings that correctional officers appeared more resilient to physical ailments, depression, anxiety, anger, and frustration were highly unexpected.

Four possible explanations would account for the higher levels of PWB scores for correctional officers: (i) because correctional officers voluntarily apply for their positions, their willingness to become and maintain their status as correctional officers reflects a resilience to the stressors of the position; (ii) correctional officers deny their stressors as a means of coping with the demands of their jobs; and (iii) that correctional officers do not have any administrative responsibilities beyond their shift; they do not bring work home, and when they leave the institution, they effectively leave their jobs behind. This is in contrast with non-correctional staff, who have ongoing long-term administrative responsibilities, and who are much more likely to bring work home or to be preoccupied with thoughts of work responsibilities at home. Finally, (iv) the demands of their jobs as correctional officers “toughens” them and increases their resilience to stressors others would find more demanding.

A salient difference between correctional officers and non-correctional officers is the likelihood in which individuals report having exercised. Correctional officers were significantly more likely to report having exercised than non-correctional officers. Among all staff, males were significantly more likely to report having exercised than females. Both groups, correctional officers, and male staff, had significantly lower self-report measures of depression and anxiety. Physical activity is associated with reduced levels of depression and anxiety (Stephens, 1988).

Physical activity has been found to reduce depression and anxiety, and to increase well-being (Martinsen, 1990; Bosscher, 1993; Sexton, et al., 1989).

The nature of correctional officer work is non-sedentary. Correctional officers are typically on their feet for most or all of their 8 hour shift, and spend a great deal of time walking, running, and climbing stairs in the course of their duties. This physically active portion of their job, combined with a greater likelihood to engage in off-duty exercise, may account for differences in the self-report measures of depression and anxiety on the Perception of Personal Well-Being measure.

Correctional officers were significantly more likely to have higher self-report measures for anger and frustration than non-correctional officers. As explained earlier, correctional officers shoulder the responsibility for much of the difficult physical and emotional work in federal prisons. Correctional officers are expected to be more likely to express anger and frustration at their duties on occasion, much more so than non-correctional workers, who are expected to reflect optimistic “upbeat” work perspectives. The “anger out” and “frustration out” workstyles of correctional officers may provide an explanation why their self-report measures indicate less depression and anxiety than non-correctional officers. They do not feel any need to repress their appraisal of a situation. Conversely, this expression of anger and frustration has been associated with higher incidence of cardiac disease (Lyness, 1993).

While the large sample size of this study has facilitated occupational differences that are statistically significant, as a practical matter they do not reflect markedly different mean scores between the groups. From a functional standpoint, the differences are not pronounced.

Occupation was a significant predictor of likelihood of injuries as well as the number of

COP days taken after the occurrence of an injury. Correctional officers were more likely to be injured, and more likely to take a greater number of COP days before returning to work. This expected finding is consistent with the demands of the correctional officer occupation, as discussed earlier. These findings were significant for male and female correctional officers.

Gender: Gender was a significant predictor of injuries in federal correctional workers in that female correctional officer staff had a significantly higher likelihood of injuries than male correctional officer staff. Among non-correctional officer staff, males had higher rates of injury than females. Consistent with findings of likelihood of injuries, gender was also found to be a significant predictor of COP days taken off among federal correctional workers. Female federal correctional officers had a higher likelihood of taking more COP days after an injury than males. Among non correctional officer staff, males had a higher likelihood of taking COP days after an injury than did females. These data suggest that the physical demands of the position, taken together with the adversarial nature of correctional officer work may be more toxic to female federal correctional workers. Conversely, male staff who are not correctional officers (and generally have greater administrative responsibility and requirements for flexibility) are at higher risk for being injured and for taking longer to recover from these injuries than their female colleagues.

Gender was a significant predictor of aggregate mean score on the PWB measure: female staff were significantly more likely to have lower scores than men. When individual components were analyzed, female staff had significantly lower scores than male staff for the components of behavioral medicine and anxiety. Male staff were significantly more likely than female staff to score higher on the components of anger, and frequency of exercise in the past 6 months.

Table 5 reflects the robustness of the differences in mean scores reported by gender for the PWB components. While the large sample size of this study has facilitated gender differences that are statistically significant, as a practical matter they do not reflect markedly different mean scores between the groups. As with the differences between occupational group responses, the differences between genders are not pronounced.

For the variables of region, gender, occupation, and security level, each was a significant predictor of injuries and COP days taken after an on-the-job injury for federal correctional workers. Within perception of personal well-being, there were fewer consistencies: two variables, gender and occupation were significant indicators of perception of personal well-being, whereas the variables of region and security level were found to have an insignificant relationship to perception of personal well-being.

Relationship between occupational injuries and perception of personal well-being:

There were no significant differences among the six security levels in measures of perception of personal well-being; therefore, it is not possible to establish a relationship between perception of well-being at security levels with significance of per capita injuries by security level. This was an unexpected finding, because security level was a significant predictor of the rate of per capita injuries in federal correctional workers.

The North Central region had a significantly greater rate of staff filing notice of injury claims than did any other region. The absence of a corresponding finding with region and perception of personal well-being negates the possibility of determining a significant relationship between regions with significantly higher rates of federal correctional worker injury and regions with significantly lower perception of personal well-being. In the federal correctional system,

there does not appear to be a significant relationship between the occupational injury rate of a region and the perception of personal well-being reported by correctional staff.

Within the analysis of federal correctional worker injuries, region was a significant predictor of injuries, in that the North Central region had a significantly higher likelihood of injuries than did all other regions. This finding was unexpected because this region is often considered by many Bureau of Prisons staff as having the highest work ethic of all of the regions, and a part of that work ethic would be the absence of workers' compensation filings.

Among many Bureau of Prisons administrators, institutions (and therefore regions) with high rates of worker injuries are synonymous with low staff morale and a correspondingly low work ethic. As revealed by the example of the North Central region, however, an analysis of staff morale and work ethic based solely on the rate of filings of notices of injury is analogous to measuring an individual's wealth solely by the number of savings accounts they hold. The critical factor to analyze with rates of injury are the number of continuation of pay days (COP) taken after an injury. For the North Central region, the rate of worker injuries is highest, while the rate of COP days taken after an injury is significantly lower than all other regions. The low number of COP days taken after a federal correctional worker injury is consistent with prevailing beliefs regarding the work ethic of the North Central region. The high rate of worker injuries may reflect a strict compliance with agency policy to file a notice of injury each time any type of injury is incurred, no matter how small. The low number of COP days taken after an injury in the North Central region may reflect staff willingness to return to their job sooner than their peers in other regions.

Several agency administrators were informally queried about the unexpected findings for

the North Central region's rate of injuries and mean number of COP days taken after a federal correctional worker injury. Each administrator questioned had the identical response: it was the reflection of high staff morale and work ethic. One administrator hypothesized that the strength of local union authorities was less in the North Central region than in other Bureau of Prisons regions. This reduced union influence was thought to be related to a greater esprit de corps among staff in the North Central region staff.

A potential explanation for the unexpected findings in the North Central region is that management practices and workstyle are different compared to other regions. Within the Bureau of Prisons culture, many prison institutions located in the North Central region are considered to be located in highly desirable locations. The cost of living tends to be less in this area of the United States, and the prevailing view is that employer and employee relations are less adversarial. If prison workers in this region are more likely to return sooner after an injury, then it may be that relationships with the supervisor are stronger, that labor relations are more positive, or that wardens in this region are more likely to make accommodations for workers that are injured to return to work (Gates, 2000). These possibilities should be investigated for future research.

It is possible that employees continue working with pain and physiological systems do not have the opportunity to recover. Individuals who tend to continue to work with pain have higher levels of physical disability (Feuerstein, et al., 1999)

Self-report measures of physical and emotional well-being did not reflect any significant differences associated with working in a minimum security prison camp and working in a penitentiary, nor were they significantly related to the region in which the federal correctional

worker's prison is located. It is possible that the perception of personal well-being self-report measure is not reflective of environmental stressors present at the different security and regional levels.

Female correctional workers (including correctional officers and non-correctional officers) had significantly lower perception of personal well-being than males. These data replicate findings in some of the areas of injuries (female federal correctional officers have higher rates of work injuries than males) and continuation of pay days (female federal correctional officers are significantly more likely to take more continuation of pay days after an injury than males), not with non-correctional officer male and female staff. A potential (but not validated) interpretation of these data could be that female federal correctional officers have a greater susceptibility to the dangers of working in the federal correctional environment, and take longer to experience wellness after an injury than male correctional officers. Correctional staff in the Bureau of Prisons are about 87% male and 13% female. The inmate population of the Bureau of Prisons is about 93% male; working in an environment of mostly male convicted felons may also have a greater effect on physical and emotional well-being in female correctional workers as compared to men. The data regarding correctional officers were inconsistent in measures of perception of personal well-being, rates of worker injuries, and likelihood of taking greater numbers of COP days following an injury: in perception of personal well-being, correctional officers had the greatest likelihood for a positive finding; in occupational injuries, correctional officers were more likely to be injured, and to take longer to return to work. Taken together, these data reflect the reality that correctional officers have the greatest exposure to the dangerous elements of working in a federal correctional environment, yet possess a higher

resilience in terms of self-report measures.

There were no significant differences between Whites, African Americans, Hispanics, and Native Americans on aggregate perception of personal well-being measures. One group, Hawaiian Americans, scored significantly higher on perception of well-being measures than all other racial/ethnic groups. (Insert statistic here). Unfortunately, the very small sample size, (n = 11), of Hawaiian Americans who responded to the perception of personal well-being measure, renders this finding of little value. Of greater importance is that race does not appear to be related to self-report measures of physical and emotional well-being.

Limitations: This study had a number of limitations. The most significant limitation is the one year period of data available. It would be useful to compare injuries and perception of personal well-being over a period of years to establish a reliability over time. It is possible that the results for this data set could differ from most years. Without numerous years to compare, the extent to which these data are consistent over time are unknown. It would be valuable to track these data as the gender of correctional officers shifts from an almost exclusively male profession (in 1980, about 92% of correctional officers were male; in 2000, about 71% of correctional officers were male).

An additional limitation of this study was the inability to correlate injured workers' responses to the perception of personal well-being measure. It would be useful to determine if injured workers had significantly different responses to self-report measures of perception of well-being. It also would be useful to know if the injured worker had filed prior federal workers' compensation claims, and what the extent of the prior injuries were.

This study did not determine the severity of the individual worker injuries reported. Each

work injury was counted as a single data point. There were no differences in reporting injuries that were very minor in nature and those that involved severe medical injuries. The study only took into account those injuries that extended to the statutory allowance of 45 days allocated by the Federal Employees Compensation Act. Days absent from duty for employees whose injuries extended beyond the COP limit of 45 days were not counted beyond this marker.

Demographic information available for the injured worker was limited. It would have been useful to determine ethnic backgrounds of injured workers, and to know how long the worker had worked at that institution, if their shift had recently changed, what their annual performance evaluation was, if their job classification had recently changed, if they had a significant life event in the recent past (e.g., serious illness, marriage, divorce, birth or loss of a child, death in the family, bankruptcy), and how many years before retirement eligibility remained. Knowledge of these data would allow for the possibility of further refining the groups of federal correctional workers at greatest risk for injury and lost time from their duties. These data would be especially useful with the occupational group that had the highest risk factors for occupational injury and lower perception of personal well-being: correctional officers: are injuries clustered in a particular age-range of correctional officers, and do specific types of injuries significantly match with male or female correctional staff? Do these injuries occur more frequently after a recent shift change, when sleep deprivation may result in attenuation of reflexes?

Collecting costs of worker injuries, in terms of salary replacement and medical cost data would provide for an analysis of which types of staff and what types of injuries constituted the greatest percentage of the workers' compensation budget. From these data, priorities could be

established for prevention programs. For example, if a higher proportion of worker injuries occur in correctional officers assigned to special response teams, additional safety precautions could be built in to this program. It also would be useful to analyze worker injury by the gender of the prison population correctional staff are assigned to, so the rates of worker injuries could be examined for same sex and opposite sex staff members. These data would help address the issue of whether female correctional officers are subject to additional stressors manifested in occupational injuries when working in male prisons vs. female prison institutions, and whether male correctional staff had different rates of injuries when working with female prisoners. Before any conclusions can be expressed based on these data, it would be worthwhile to examine data from a large number of years to determine if these data were consistent over time.

Practical implications: The major implication of this study is that federal correctional officers, male and female, bear the major impact of the dangers of working in prisons, measured by occupational injuries, COP days to recover from those injuries. That these risks were not reflected in the PWB self-report measure was indeed surprising. Programs to ameliorate the dangers correctional officers face should be given priority with an immediate measurement of impact to determine effect on agency worker compensation costs. The success of these initial intervention programs would then be used to direct further prevention programs for other at-risk groups of correctional staff in federal prisons. Many state correctional agencies mirror their programs and services on the federal prison model. The success of prevention programs targeting employees at elevated risk for occupational injury could be disseminated to state correctional agencies, to maximize the impact on the national correctional community. Such an initiative could potentially reduce thousands of correctional worker injuries, and save tens of millions of dollars.

As further studies provide additional data for groups of federal correctional workers at elevated risk for occupational injury, prison administrators can base future staffing decisions and special programs, including additional specific incentives for correctional officers who face the increased likelihood of being injured at their duty stations. Rotating assignments, allowances for time off between routine shift work changes, and negotiations for alternative duty programs after correctional staff have been injured are examples of considerations that could be taken with objective, measurable data to illustrate the dangers faced by federal correctional workers.

The major value that has emerged from this study has been the opportunity to evaluate longstanding agency beliefs regarding federal occupational injuries. There are widely varying opinions about federal correctional worker injuries among federal correctional workers; because this study is the first of its type for the federal correctional workforce, there has not been any scientific reason to attach validity to one opinion over another. Because of this initial study, which hopefully will result in further studies of occupational injuries in the federal workforce, it is known that female correctional staff do not always have a higher rate of injuries, or a longer period of lost time from their duty assignment after an injury. It is known that security level is not always related to rate of injuries or COP days taken. It is known that self-report measures of perception of personal well-being do not indicate significant racial differences in the Bureau of Prisons.

Most importantly, however, it is known that correctional officers appear to have the highest degree of vulnerability to occupational stress and injuries in the federal correctional workforce. These data will be useful to demonstrate and document the “silent hero” status of

these members of the federal law enforcement community and their sacrifices to maintain the security and administration of the federal correctional system. Their role provides an important contribution to society; the price paid in terms of elevated risks for lifelong injuries is established. The development of prevention strategies to reduce injuries and taxpayer costs associated with workers' compensation injuries will constitute more than adequate justification for the effort spent analyzing the data for this study.

Finally, this study illustrates the importance of analyzing specific variables of the federal correctional workforce, i.e., the types of jobs federal correctional workers have (correctional officer or non-correctional officer), where they work (high or low security, and geographical region of the country), whether they are male or female. Analysis of data by these variables (as a starting point) is a critical factor in the determination of which groups are best served by prevention programs to reduce occupational injuries and enhance worker perception of well-being.

Conclusion

This dissertation examined occupational injuries and perception of personal well-being in federal correctional workers. This is the first known work of its kind; there is clearly much more work to be done in this area. There are several future directions that merit study.

It would be valuable to perform an in-depth analysis of the entire Prison Social Climate Survey instrument. This instrument provides a wealth of information regarding correctional workers and managers. Special emphasis should be placed upon the analysis of workstyle issues, management practices, measures of workplace satisfaction, and measures of perception of personal safety to provide additional insight regarding the environment in which correctional workers do their jobs.

Additional questions should be drafted for consideration within the Prison Social Climate Survey, specifically with regard to occupational injuries. For example, workers should be queried whether they have incurred occupational injuries that they have not reported, and if this is the case, why they were not reported. Questions regarding length of time away from their job after an injury should be asked, with attention to the supervisor-employee relationship, and social support with their peers.

Notice of occupational injury forms should be drafted (for use within the Bureau of Prisons) that provide more specific information regarding the nature of the workers' injury (i.e., confrontation with an inmate as opposed to a backstrain while lifting a heavy piece of equipment). Data from these forms would provide more specific information as to safety "hot spots" within the institution that call for extraordinary safety procedures.

To provide an incentive for Wardens to reduce workers' compensation costs, a pilot program should be evaluated and implemented in a select number of institutions (two per region,

with like populations, missions, and security levels) that would provide for the establishment of a cost center for days of work missed by staff after an occupational injury. As indicated earlier, costs for these days lost from work are currently paid for by the central office. By making the institutions accountable for the costs associated with lost time, there would be additional incentives to take an active role in case management of worker injuries. As part of this process, temporary alternative duty assignments can be evaluated to determine if injured workers could return to work with a meaningful job assignment while they heal from their occupational injury.

Stronger partnerships are advocated between the prison institutions and the Office of Workers' Compensation field offices. As these partnerships are established, data can be analyzed to determine what effect, if any, there is on workers' compensation costs.

Tables

Table 1: Perception of Personal Well-Being Data, Mean Scores, Standard Deviation

| | Mean Score | +/- S.D. |
|----------------------------------|-------------------|-----------------|
| <u>Gender</u> * | | |
| Males | 1.14 | 1.04 |
| Females | 1.28 | 1.02 |
| Entire Staff | 1.17 | 1.04 |
| <u>Occupation</u> * | | |
| Correctional Officers | | |
| Males | 1.05 | 1.10 |
| Females | 1.13 | 1.05 |
| Entire Staff | 1.06 | 1.09 |
| Non-Correctional Officers | | |
| Males | 1.18 | 1.10 |
| Females | 1.31 | 1.05 |
| Entire Staff | 1.22 | 1.09 |

*Statistically significant

Table 1 (continued)**Security Level**

| | | |
|----------------|-----|------|
| AdMax | 1.2 | 1.01 |
| Administrative | 1.1 | 1.04 |
| High | 1.2 | 1.13 |
| Medium | 1.2 | 1.10 |
| Low | 1.2 | 1.16 |
| Minimum | 1.2 | 1.18 |

Region

| | | |
|---------------|------|------|
| North Central | 1.19 | 0.98 |
| South Central | 1.17 | 1.05 |
| Western | 1.09 | 1.00 |
| MidAtlantic | 1.21 | 1.05 |
| Northeast | 1.24 | 1.10 |
| Southeast | 1.12 | 1.01 |

Statistical Significance, Perception of Personal Well-Being

| | F | df (bs/ws) | ss | p value |
|-----------------------|----------|-------------------|-----------|----------------|
| Security Level | 1.18 | 5/3901 | 5.9144 | 0.319 |
| Occupation | 21.65 | 1/3905 | 1276.1 | 0.0001 |
| Gender | 14.89 | 1/3905 | 16.019 | 0.0001 |
| Region | 1.84 | 5/3901 | 9.94575 | 0.1 |

Table 2: Perception of Well-Being Data by Subscale, Mean Score and Standard Deviation**Behavioral Medicine**

| Gender * | Mean Score | +/- S.D. |
|-----------------|-------------------|-----------------|
| Males | 1.19 | 1.19 |
| Females | 1.39 | 1.20 |

Occupation *

| | | |
|---------------------------|------|------|
| Correctional Officers | 1.15 | 1.18 |
| Non-Correctional Officers | 1.29 | 1.19 |

Depression**Gender**

| | | |
|---------|------|------|
| Males | 0.70 | 1.17 |
| Females | 0.77 | 1.19 |

Occupation *

| | | |
|---------------------------|------|------|
| Correctional Officers | 0.63 | 1.13 |
| Non-Correctional Officers | 0.76 | 1.18 |

Anxiety**Gender ***

| | | |
|---------|------|-----|
| Males | 1.30 | 1.3 |
| Females | 1.52 | 1.3 |

Occupation *

| | | |
|---------------------------|------|------|
| Correctional Officers | 1.24 | 1.28 |
| Non-Correctional Officers | 1.42 | 1.31 |

Table 2: Continued**Anger**

| Gender | Mean Score | +/- S.D. |
|---------------------------|-------------------|-----------------|
| Males | 1.15 | 1.57 |
| Females | 1.08 | 1.46 |
| Occupation * | | |
| Correctional Officers | 1.07 | 1.51 |
| Non-Correctional Officers | 1.17 | 1.56 |

Frustration

| Gender | | |
|---------------------------|------|------|
| Males | 2.04 | 1.93 |
| Females | 2.30 | 1.93 |
| Occupation * | | |
| Correctional Officers | 1.75 | 1.81 |
| Non-Correctional Officers | 2.29 | 1.96 |

Change in Tobacco Usage

| Gender | | |
|---------------------------|------|------|
| Males | 2.03 | 1.00 |
| Females | 2.00 | 1.06 |
| Occupation | | |
| Correctional Officers | 2.01 | 1.01 |
| Non-Correctional Officers | 2.02 | 1.00 |

Table Two, Continued**Change in Alcohol Consumption**

| Gender | Mean Score | +/- S.D. |
|---------------------------|-------------------|-----------------|
| Males | 1.72 | 0.95 |
| Females | 1.74 | 0.85 |
| Occupation | | |
| Correctional Officers | 1.71 | 0.97 |
| Non-Correctional Officers | 1.74 | 0.90 |

Exercise

| Gender * | | |
|---------------------------|------|------|
| Males | 0.79 | 0.40 |
| Females | 0.73 | 0.44 |
| Occupation * | | |
| Correctional Officers | 0.80 | 0.40 |
| Non-Correctional Officers | 0.76 | 0.42 |

*Statistically significant

Table 2 (Continued): Statistical Significance, Perception of Personal Well-Being Subscales

| | F | df | ss | p value |
|------------------------------|----------|-----------|-----------|----------------|
| Behavioral Medicine * | | | | |
| Gender | 17.65 | 1 | 24.81 | 0.0001 |
| Occupation | 6.36 | 1 | 8.94 | 0.01 |
| Within-subject df = 3893 | | | | |
| Depression * | | | | |
| Gender | 0.66 | 1 | 0.892 | 0.41 |
| Occupation | 10.20 | 1 | 13.80 | 0.001 |
| Within-subject df = 3893 | | | | |
| Anxiety * | | | | |
| Gender | 17.23 | 1 | 28.95 | 0.0001 |
| Occupation | 9.38 | 1 | 15.76 | 0.002 |
| Within-subject df = 3895 | | | | |
| Anger * | | | | |
| Gender | 3.00 | 1 | 7.16 | 0.13 |
| Occupation | 3.75 | 1 | 8.93 | 0.01 |
| Within-subject df = 3879 | | | | |

Table Two (continued)**Frustration ***

| | | | | |
|------------|-------|---|-------|--------|
| Gender | 1.54 | 1 | 5.58 | 0.21 |
| Occupation | 58.43 | 1 | 212.2 | 0.0001 |

Within-subject df = 3887

| Change in Tobacco | F | df | ss | p value |
|--------------------------|----------|-----------|-----------|----------------|
| Gender | 0.33 | 1 | 0.32 | 0.55 |
| Occupation | 0.13 | 1 | 0.12 | 0.84 |

Within-subject df = 1243

Change in Alcohol

| | | | | |
|------------|------|---|------|------|
| Gender | 0.06 | 1 | 0.05 | 0.80 |
| Occupation | 0.48 | 1 | 0.41 | 0.48 |

Within-subject df = 1989

Exercise *

| | | | | |
|------------|-------|---|------|--------|
| Gender | 11.73 | 1 | 1.99 | 0.0006 |
| Occupation | 5.12 | 1 | 0.87 | 0.02 |

Within-subject df = 3840

*Statistically significant

Table 3: Workers Compensation Data: Injury Rates and Continuation of Pay (COP) Days

| Gender * | Injury Rates per 100 staff | Mean COP Days | +/- S.D. |
|----------------------------------|-----------------------------------|----------------------|-----------------|
| Males | 8.5 | 6.7 | 13.1 |
| Females | 7.5 | 6.7 | 12.5 |
| Entire Staff | 8.3 | 6.7 | 12.9 |
| Occupation * | | | |
| <u>Correctional Officers</u> | | | |
| Males | 8.8 | 7.0 | 13.6 |
| Females | 9.9 | 8.6 | 13.8 |
| Entire Staff | 8.9 | 7.2 | 13.6 |
| <u>Non-Correctional Officers</u> | | | |
| Males | 8.3 | 6.3 | 12.6 |
| Females | 7.0 | 6.1 | 11.9 |
| Entire Staff | 7.9 | 6.3 | 12.4 |
| Security Level * | | | |
| AdMax | 8.7 | 8.4 | 15.0 |
| Administrative | 9.4 | 7.5 | 14.2 |
| High | 8.6 | 6.0 | 12.4 |
| Medium | 7.7 | 6.8 | 12.9 |
| Low | 8.8 | 6.3 | 12.5 |
| Minimum | 5.1 | 6.6 | 11.0 |
| Region * | | | |
| North Central | 10.6 | 4.8 | 11.5 |
| South Central | 7.7 | 7.6 | 13.5 |
| Western | 7.2 | 7.0 | 12.7 |
| MidAtlantic | 6.5 | 7.1 | 13.4 |
| Northeast | 9.1 | 8.0 | 13.7 |
| Southeast | 8.2 | 6.7 | 13.3 |

*Statistically significant

Table 3 (continued)

| Statistical significance, rates of injury | p value (stepwise logistic regression) |
|--|---|
| Region | <0.0001 |
| Security Level | <0.0001 |
| Occupation | <0.02 |
| Gender | <0.04 |

| Statistical significance, continuation of pay days | p value (stepwise logistic regression) |
|---|---|
| Region | <0.0001 |
| Security Level | <0.0001 |
| Occupation | <0.0001 |
| Gender | <0.01 |

Table 4: Odds Ratios of Injury Occurrence

| | | Odds Ratio | Lower/ Upper 95% Confidence Intervals |
|-------------------------|---|-------------------|--|
| Gender * | Female vs. Male | 0.895 | 0.805/0.995 |
| Occupation * | Non-Correctional Officer vs. Correctional Officer | 1.113 | 1.017/1.218 |
| Region * | Mid-Atlantic vs. N.C. | 0.584 | 0.500/0.683 |
| | Northeast vs. N.C. | 0.802 | 0.699/0.919 |
| | South Central vs. N.C. | 0.675 | 0.585/0.778 |
| | Southeast vs. N.C. | 0.759 | 0.658/0.877 |
| | West vs. N.C. | 0.654 | 0.557/0.767 |
| Security Level * | | | |
| | Admin vs. Minimum | 1.649 | 1.260/2.157 |
| | High vs. Minimum | 1.458 | 1.111/1.915 |
| | Low vs. Minimum | 1.720 | 1.326/2.231 |
| | Medium vs. Minimum | 1.400 | 1.083/1.811 |
| | Admax vs. Minimum | 1.146 | 0.723/1.815 |

(N.C. = North Central)

*Statistically significant

Table 5: Mean Ratios of Continuation of Pay Days

| | | Mean Ratio | Lower/Upper 95% Confidence Intervals |
|---------------------|------------------------|-------------------|---|
| Gender * | Female vs. Male | 1.05 | 1.01/1.10 |
| Occupation * | Non C.O. vs. C.O. | 1.13 | 1.01/1.21 |
| Region * | N.C. vs. Mid-Atlantic | 1.81 | 1.700/1.930 |
| | N.C. vs. Northeast | 1.91 | 1.810/2.020 |
| | N.C. vs. South.Central | 1.81 | 1.710/1.910 |
| | N.C. vs. Southeast | 1.63 | 1.540/1.730 |
| | N.C. vs. West vs. | 1.69 | 1.580/1.810 |
| Security * | Admin vs. AdMax | 0.67 | 0.59/0.76 |
| | High vs. Admax | 0.46 | 0.40/0.53 |
| | Low vs Admax | 0.44 | 0.39/0.51 |
| | Medium vs Admax | 0.52 | 0.45/0.59 |
| | Minimum vs Admax | 0.49 | 0.41/0.58 |

(C.O. = Correctional Officer)

(N.C. = North Central)

*Statistically significant

Figures

Figure 1
Injury Rates of Federal Correctional Workers by Gender

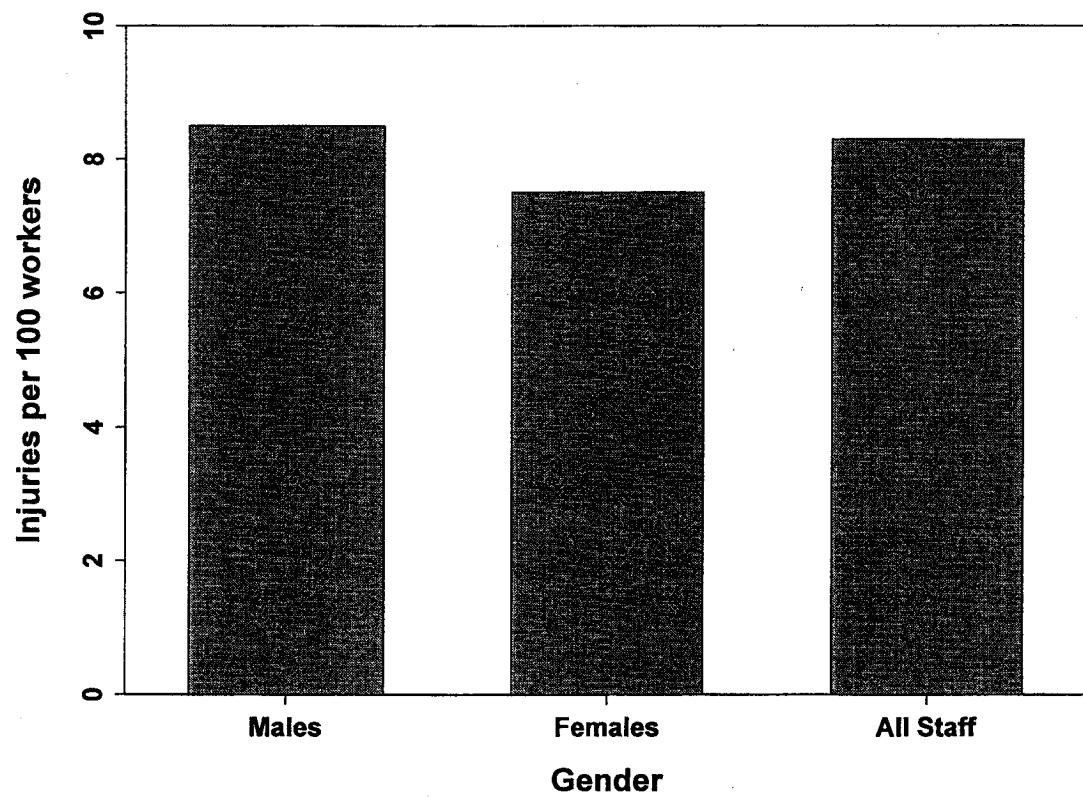


Figure 2
Injury Rates by Occupation and Gender

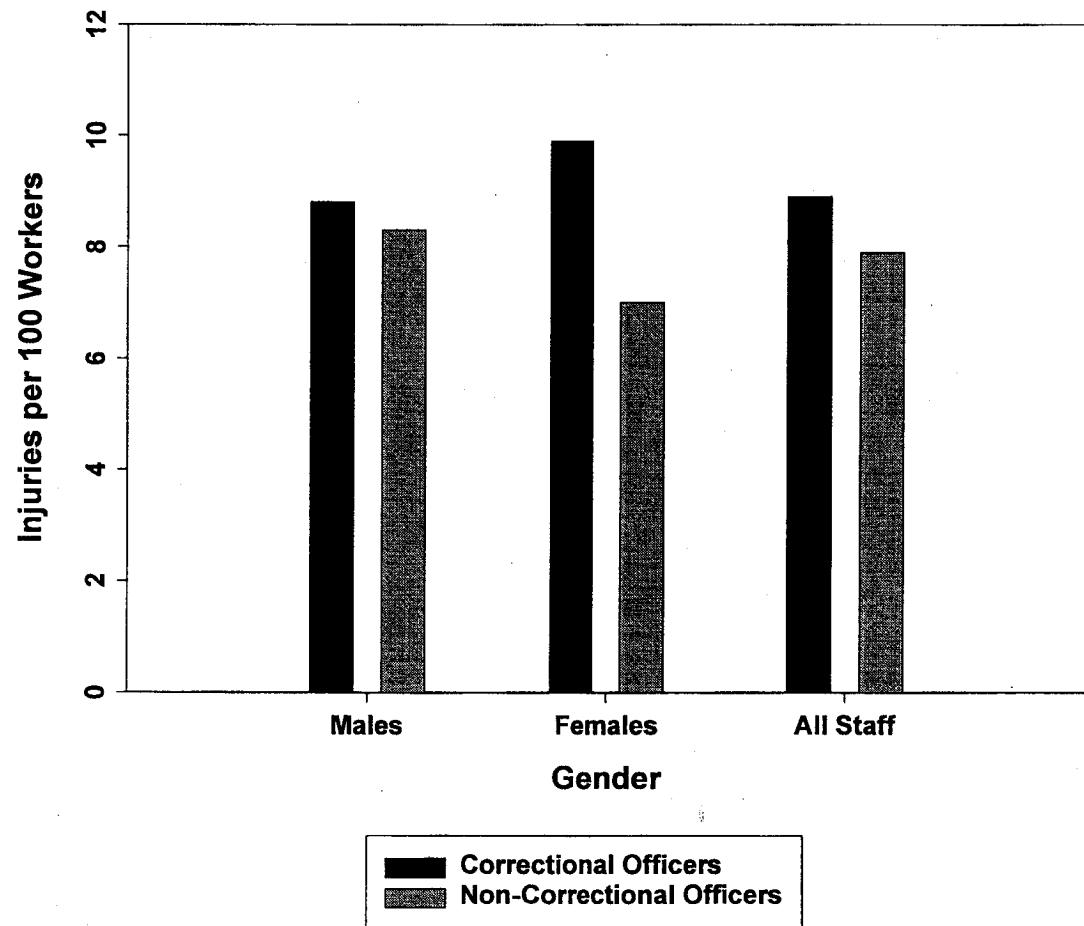


Figure 3
Injury Rates by Security Level

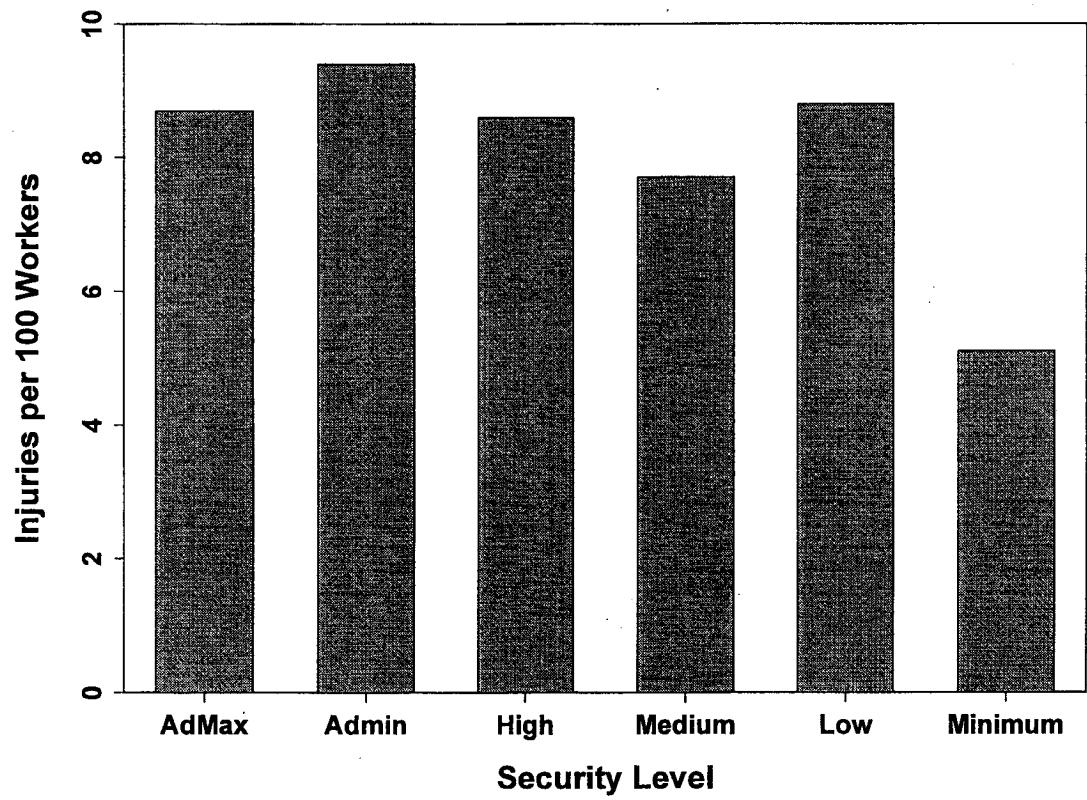


Figure 4
Injury Rates by Region

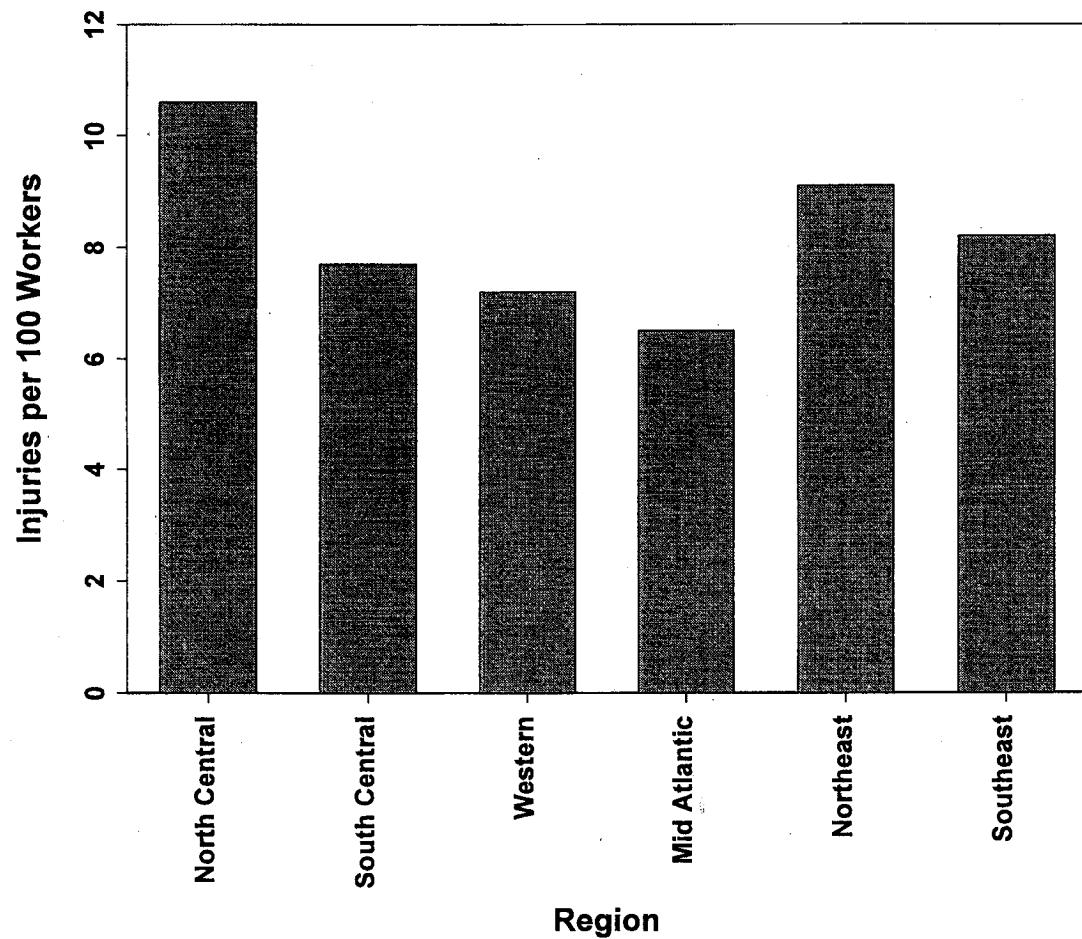


Figure 5

Mean Number of Days with Continuation of Pay by Gender

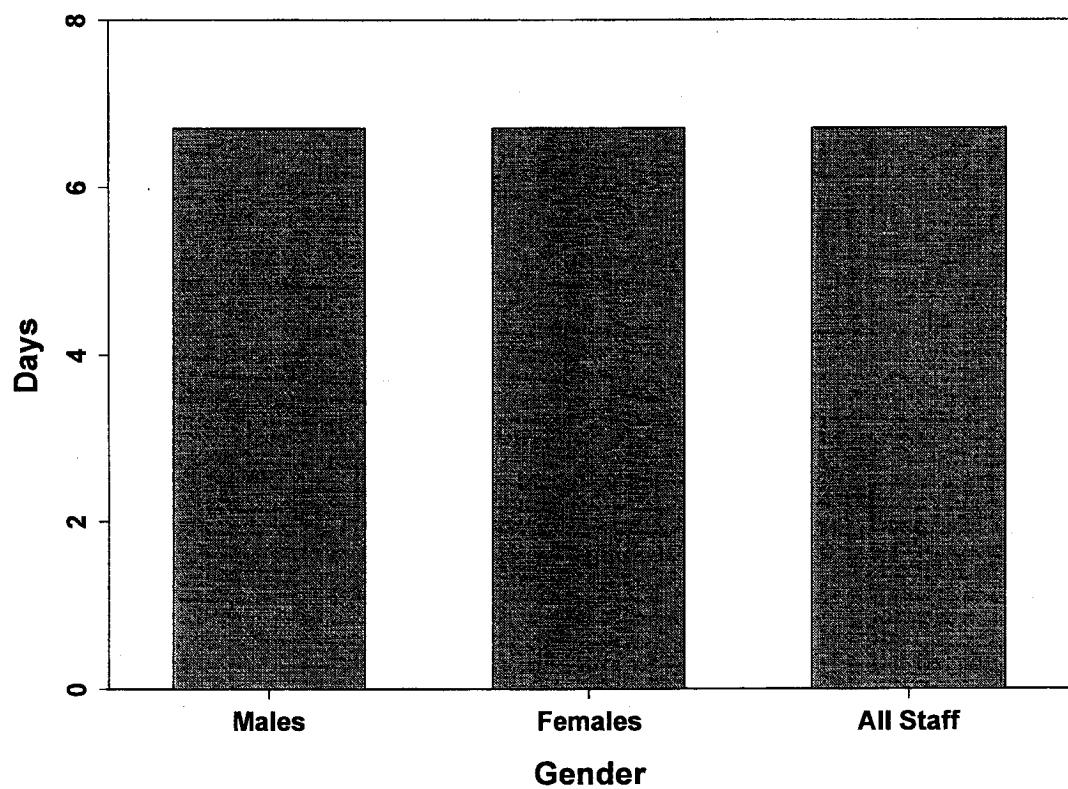


Figure 6

**Number of Days with Continuation of Pay
by Occupation and Gender**

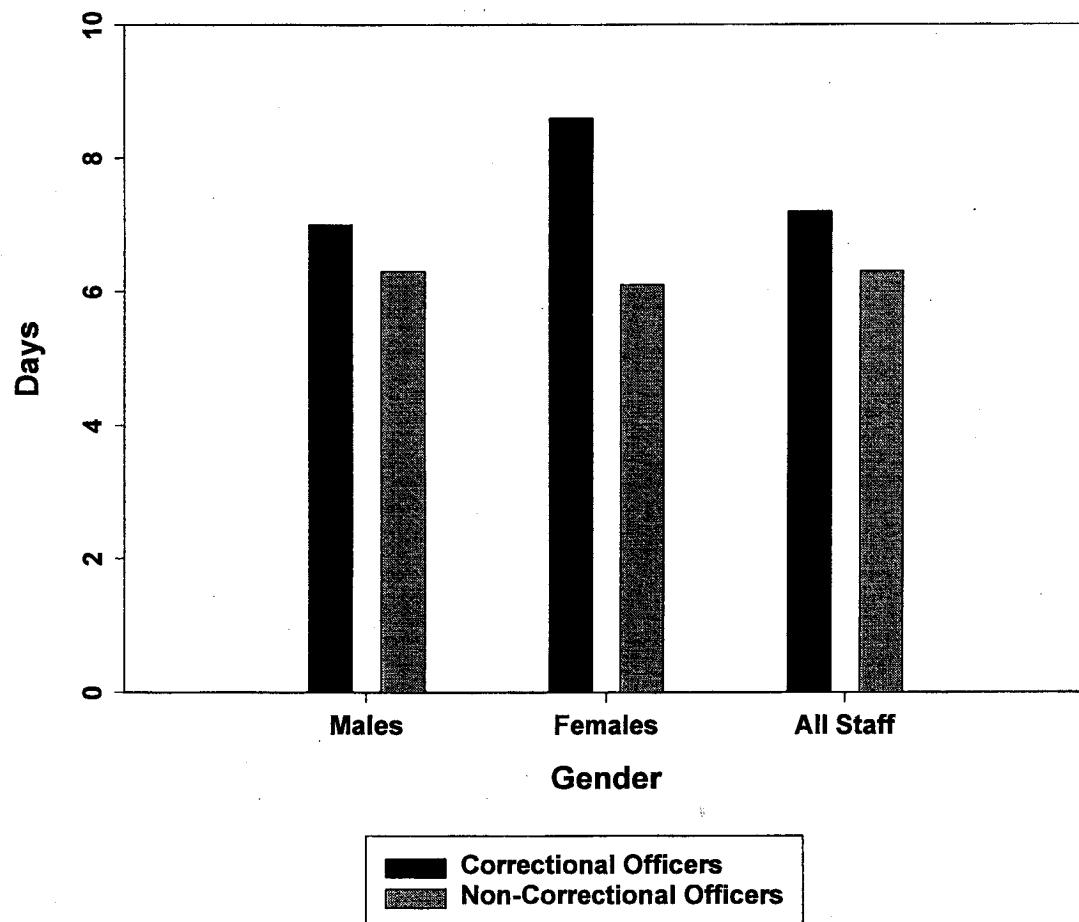


Figure 7
Mean Number of Days with Continuation of Pay by Region

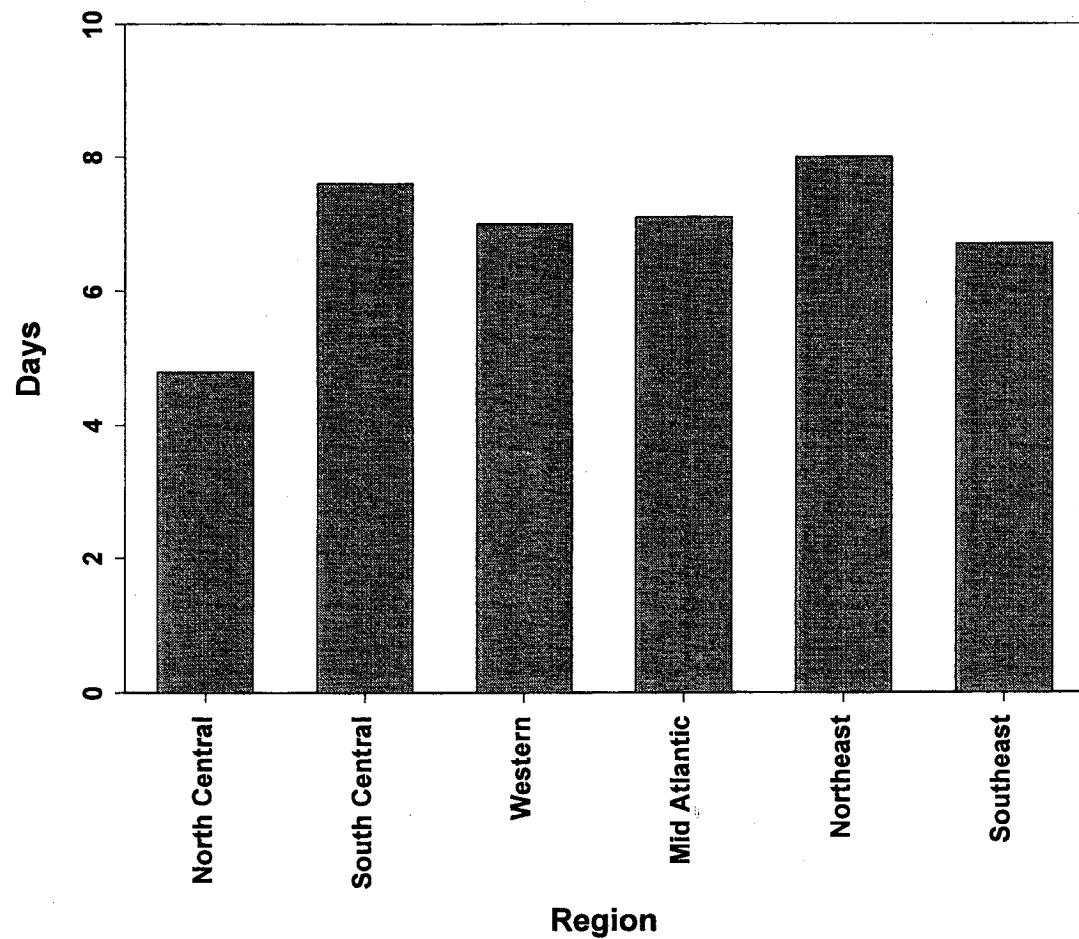


Figure 8

Days with Continuation of Pay by Security Level

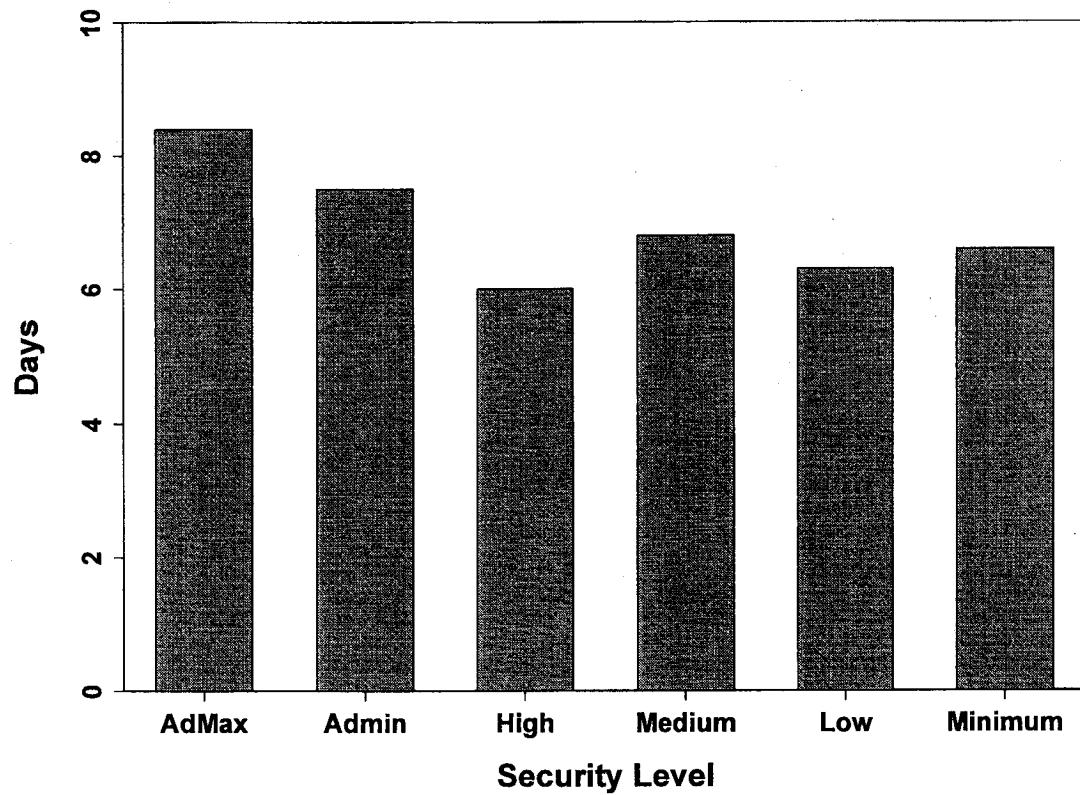


Figure 9

Perception of Personal Well-Being by Gender

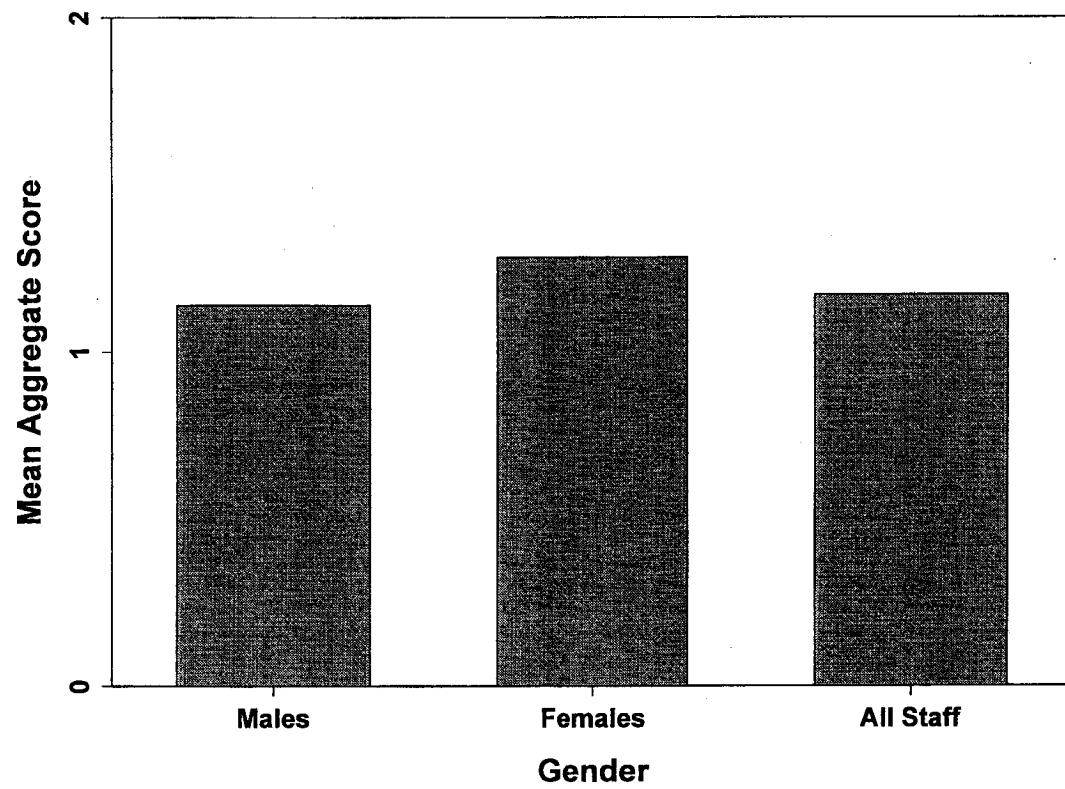


Figure 10
Perception of Personal Well-Being
by Occupation and Gender

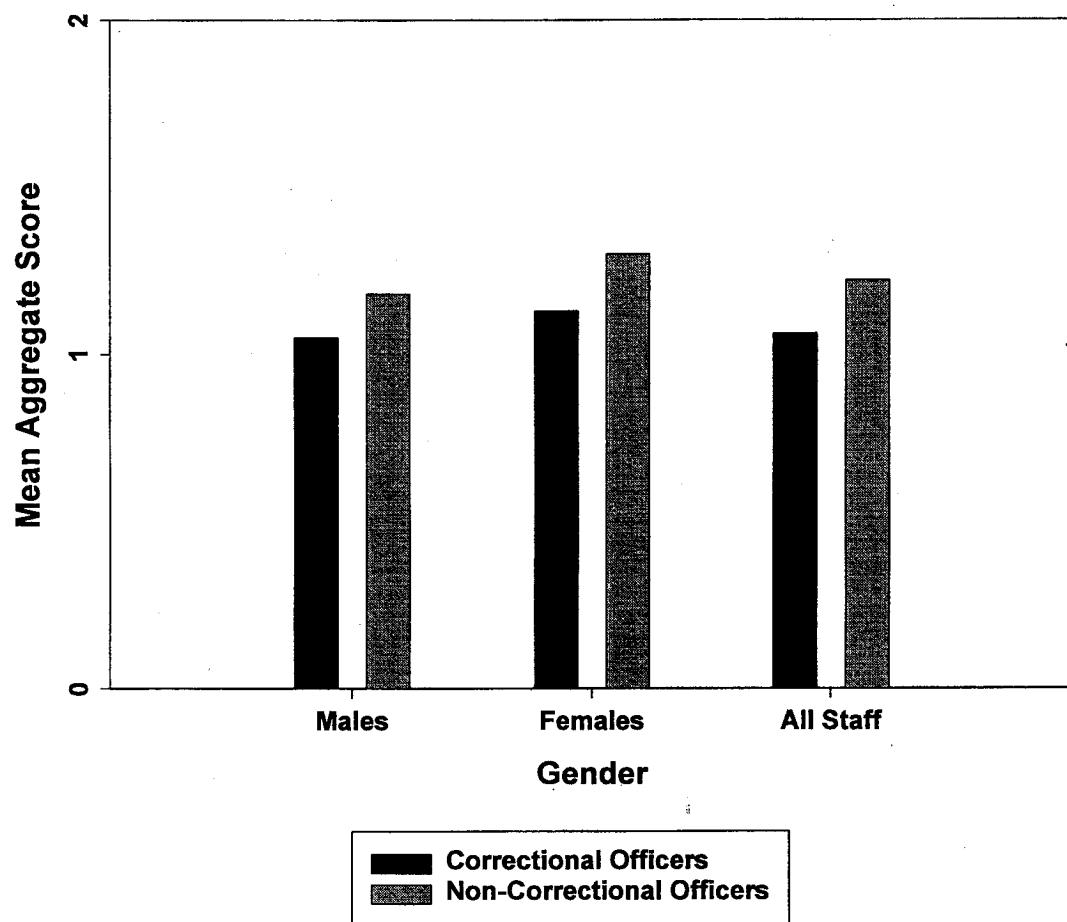


Figure 11

Perception of Personal Well-Being by Security Level

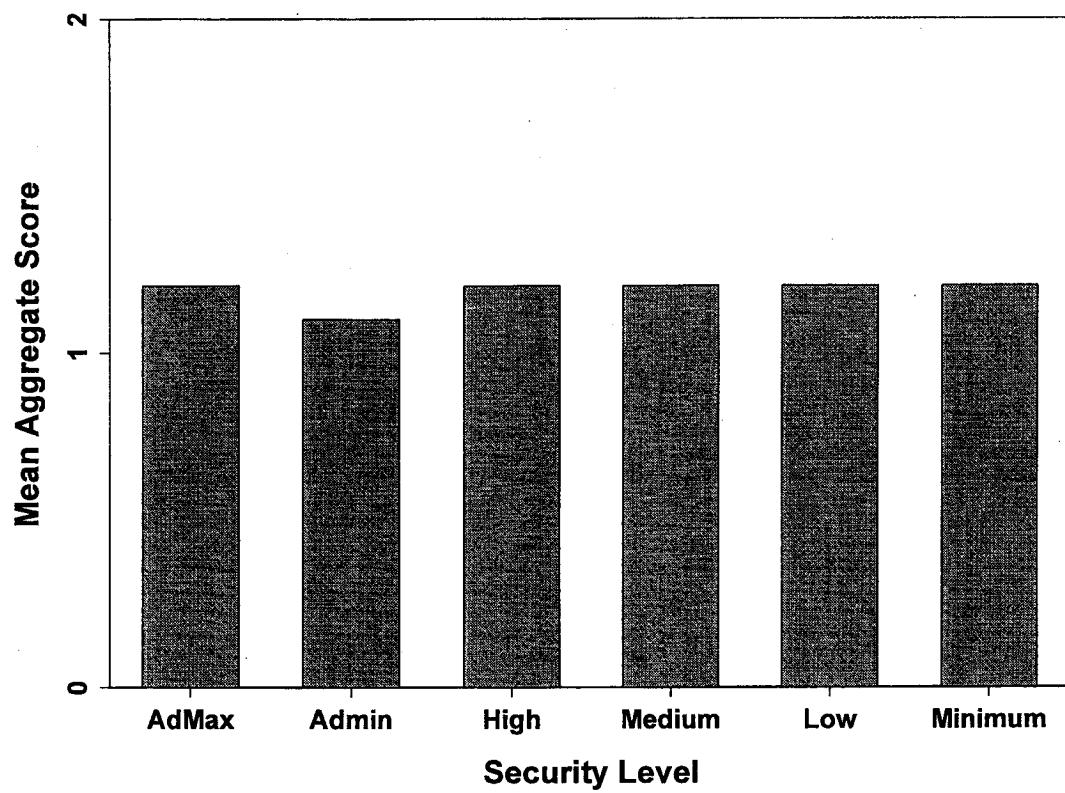


Figure 12
Perception of Personal Well-Being by Region

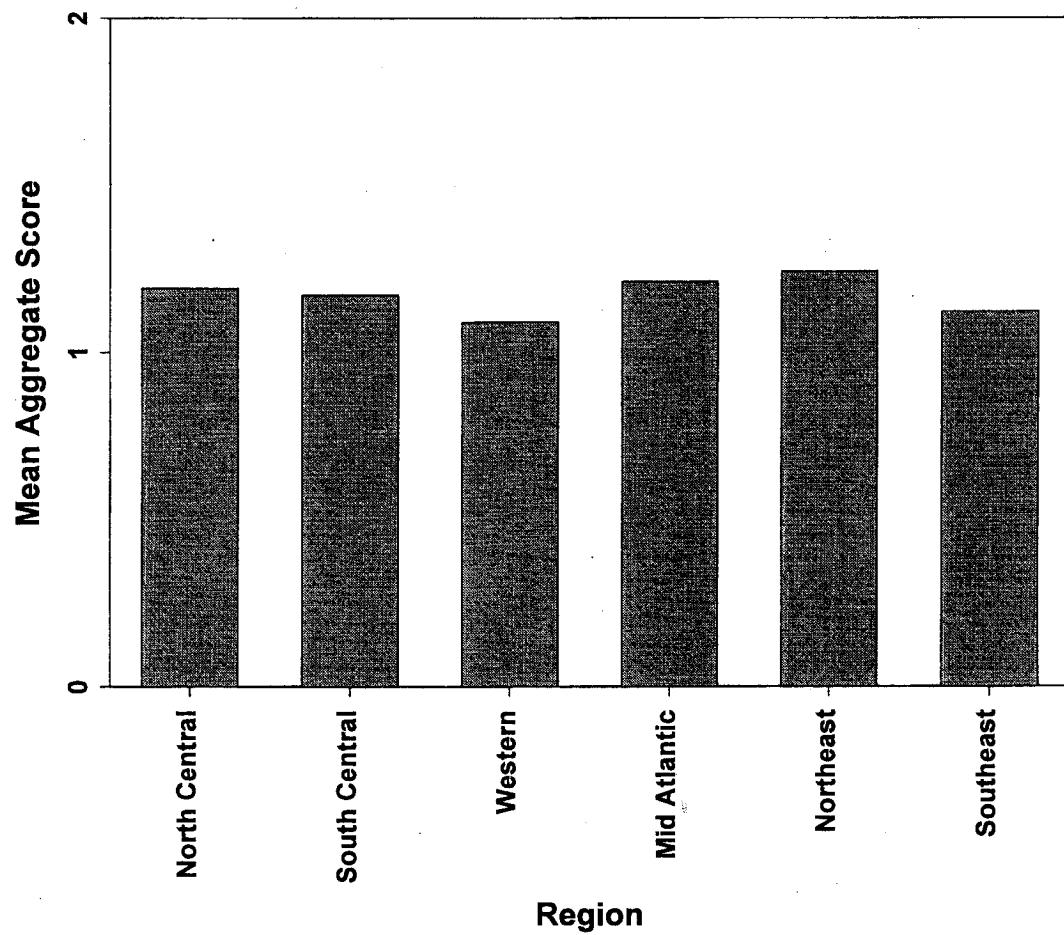


Figure 13

**Perception of Personal Well-Being by Gender
Subscale: Behavioral Medicine**

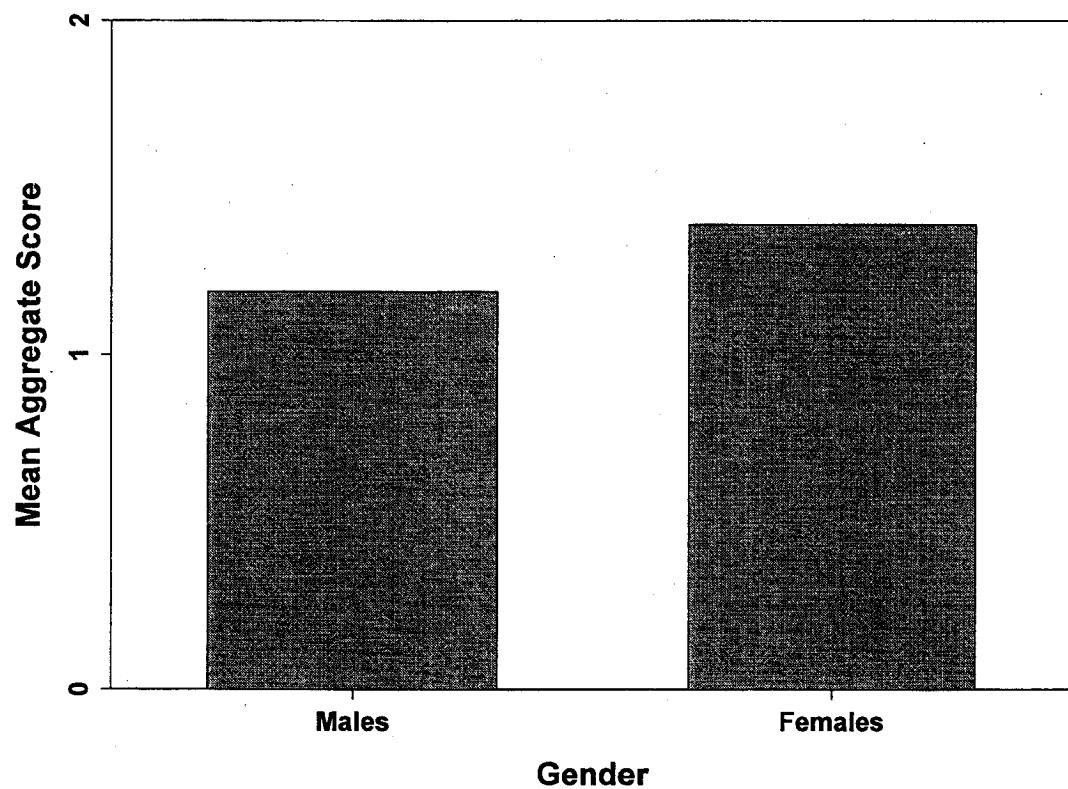


Figure 14

**Perception of Personal Well-Being by Occupation
Subscale: Behavioral Medicine**

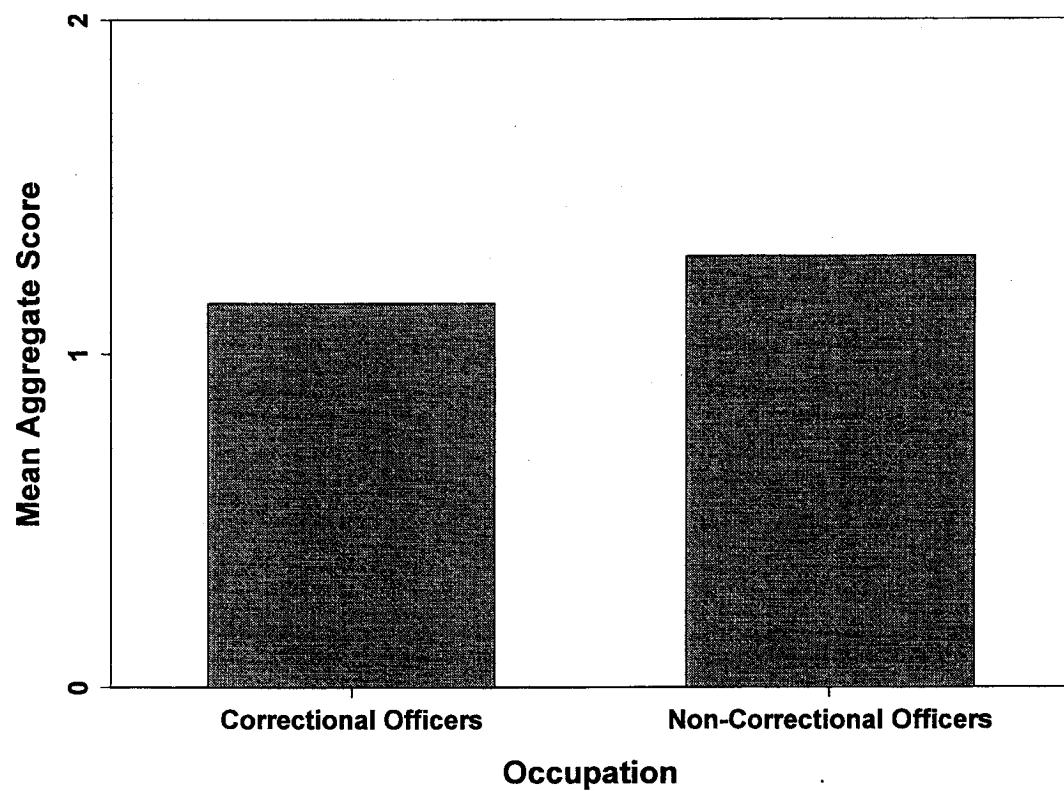


Figure 15

**Perception of Personal Well-Being by Gender
Subscale: Depression**

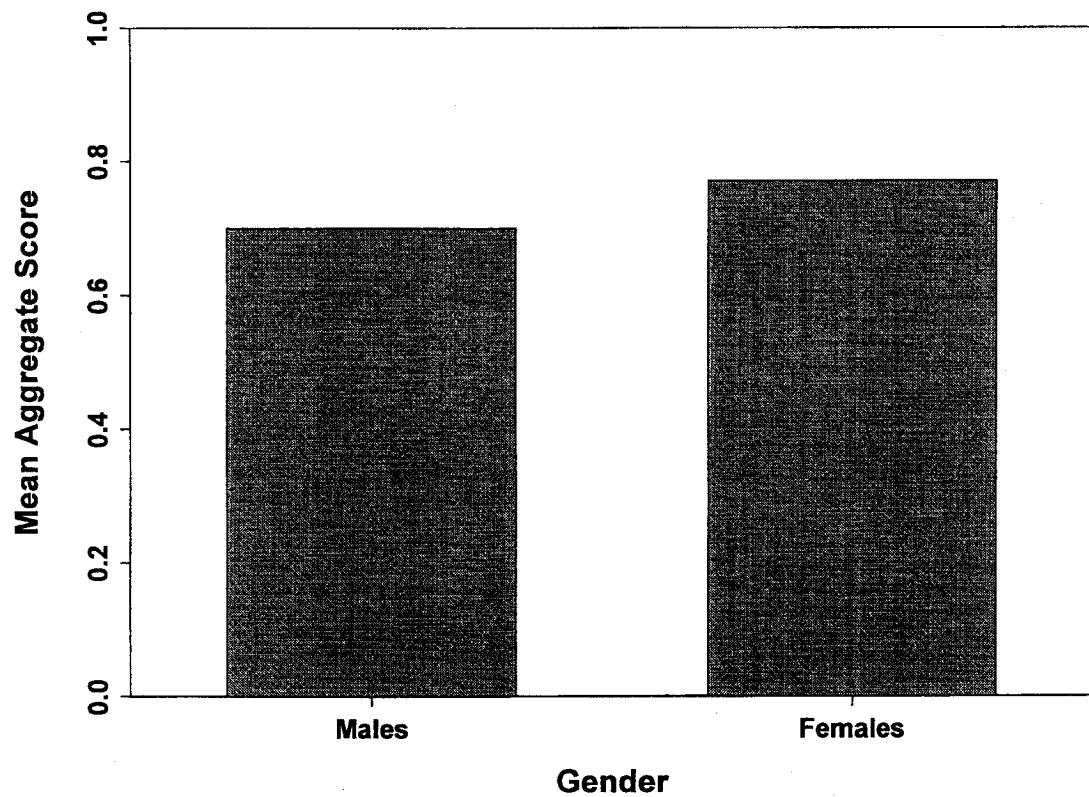


Figure 16

**Perception of Personal Well-Being by Gender
Subscale: Anxiety**

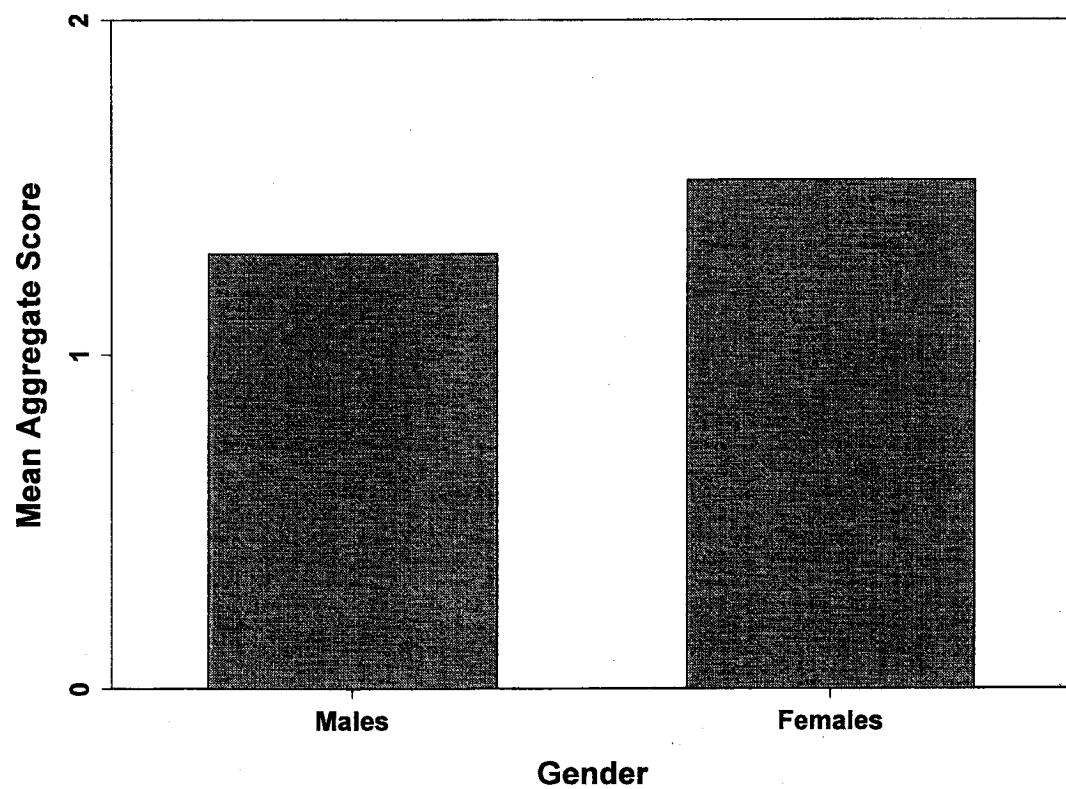


Figure 17

**Perception of Personal Well-Being by Occupation
Subscale: Anxiety**

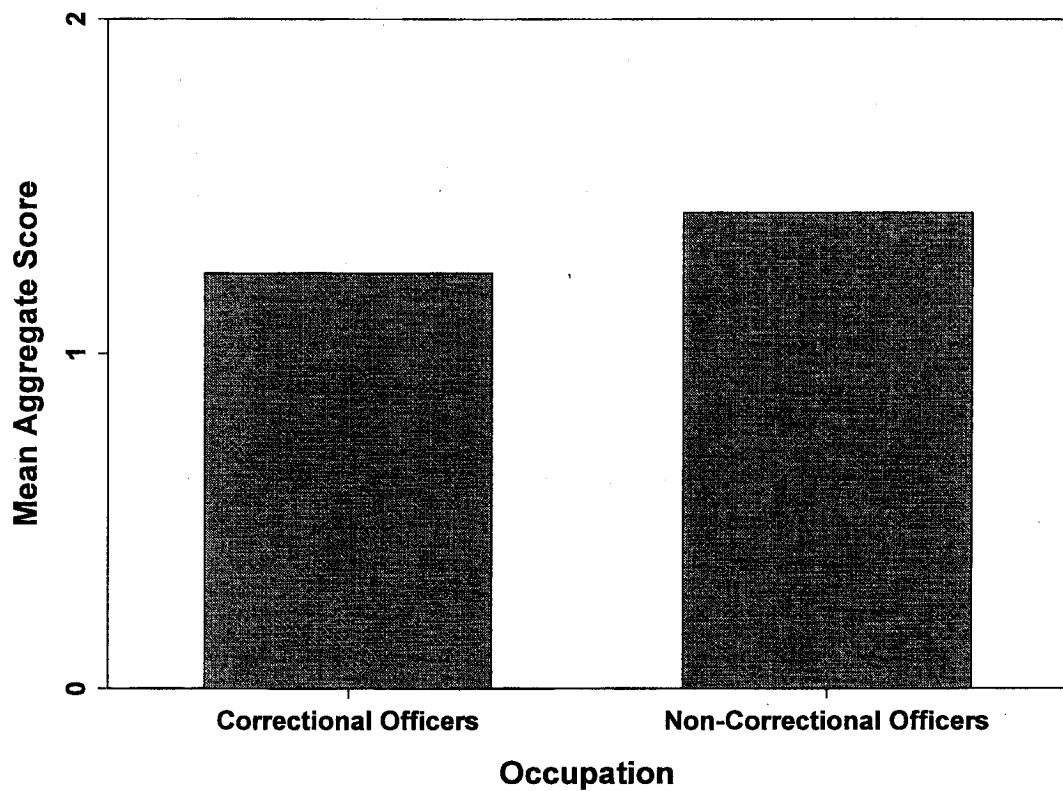


Figure 18

**Perception of Personal Well-Being by Occupation
Subscale: Frustration**

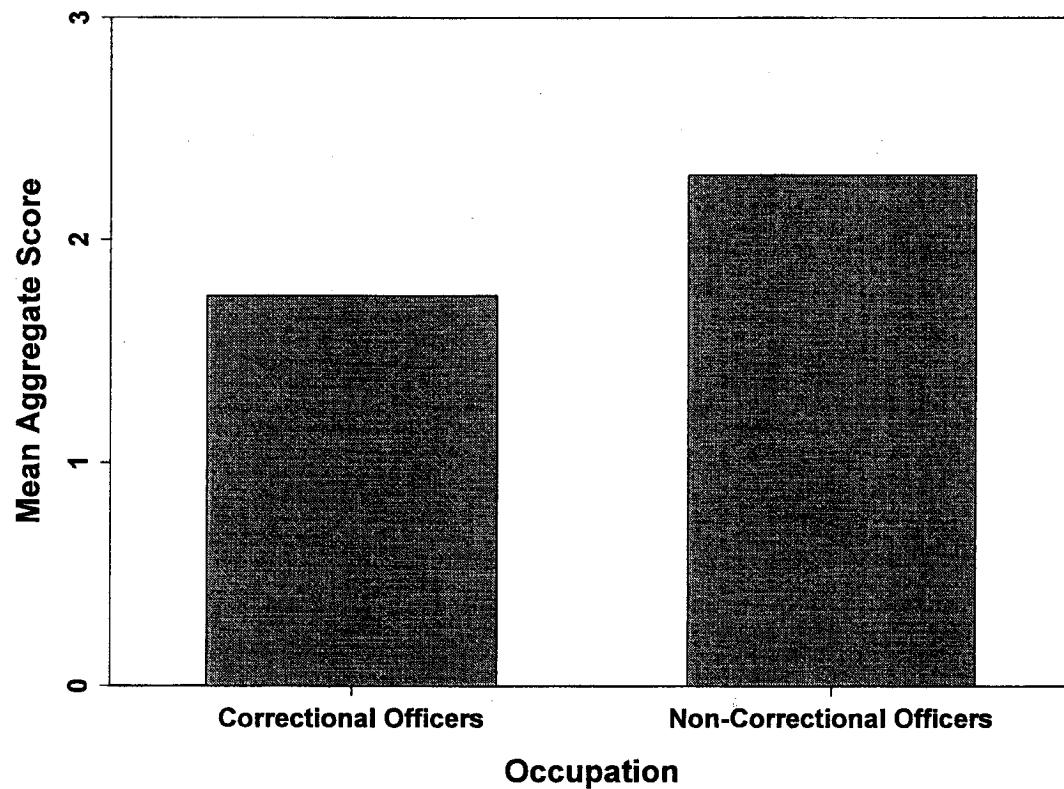


Figure 19

**Perception of Personal Well-Being by Gender
Subscale: Anger**

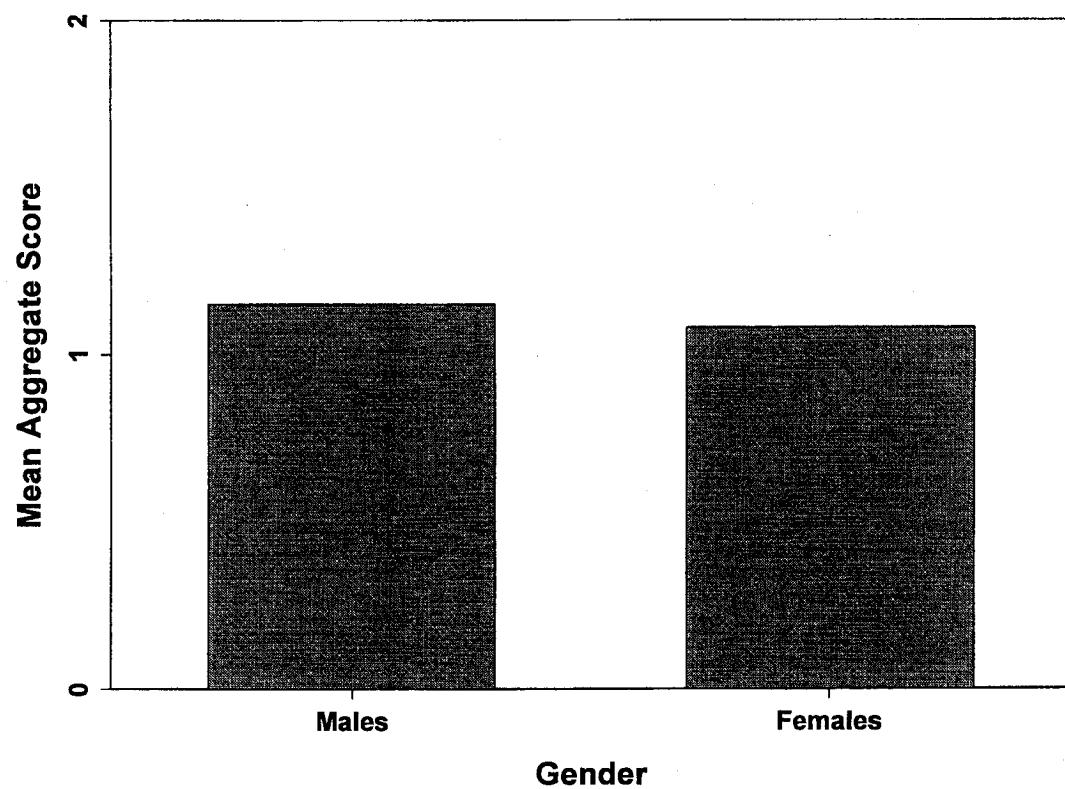


Figure 20

**Perception of Personal Well-Being by Occupation
Subscale: Anger**

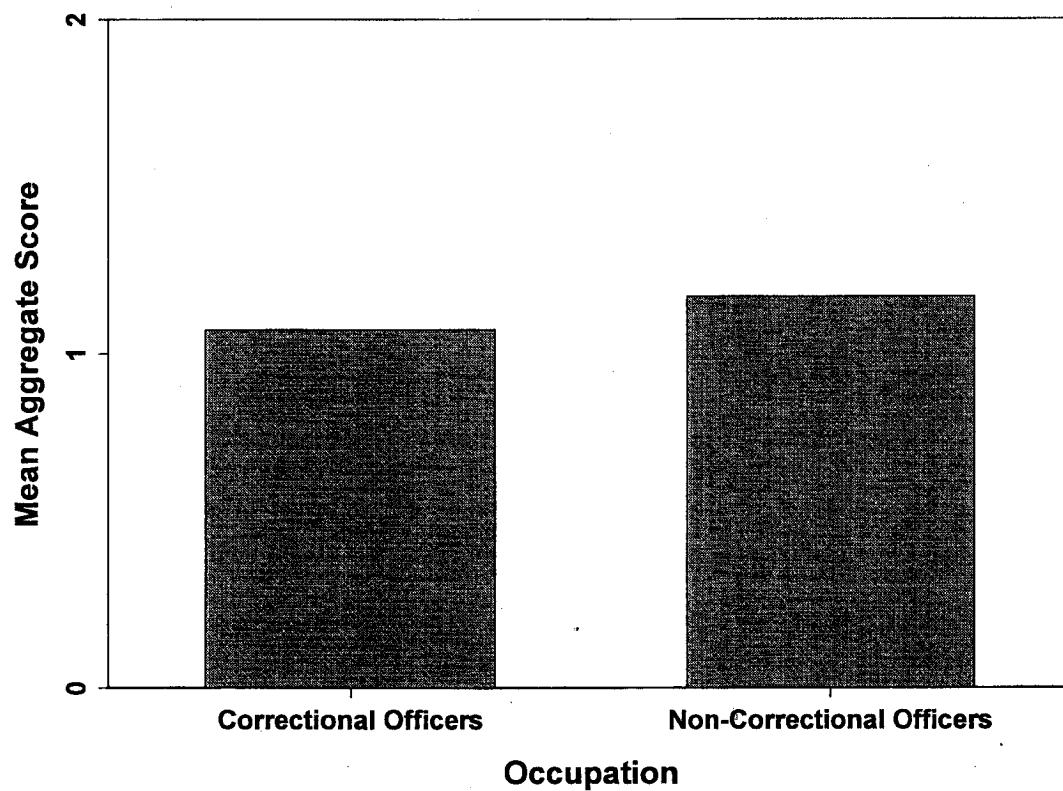
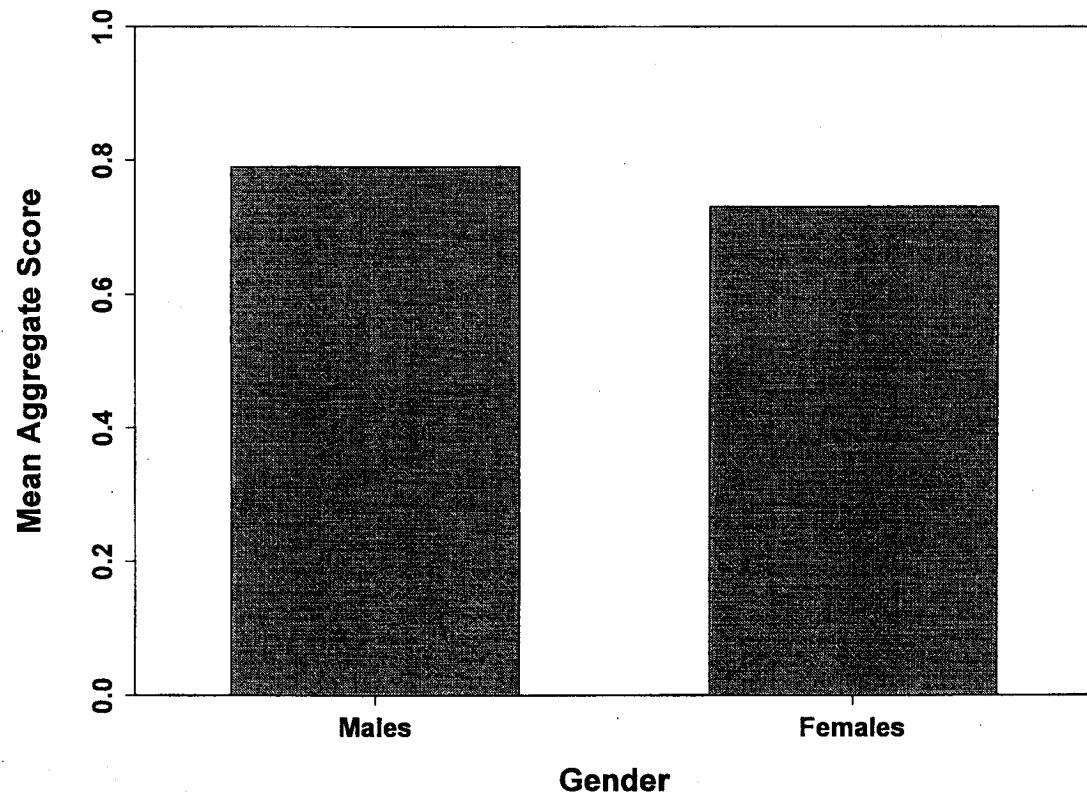


Figure 21

**Perception of Personal Well-Being by Gender
Subscale: Exercise**



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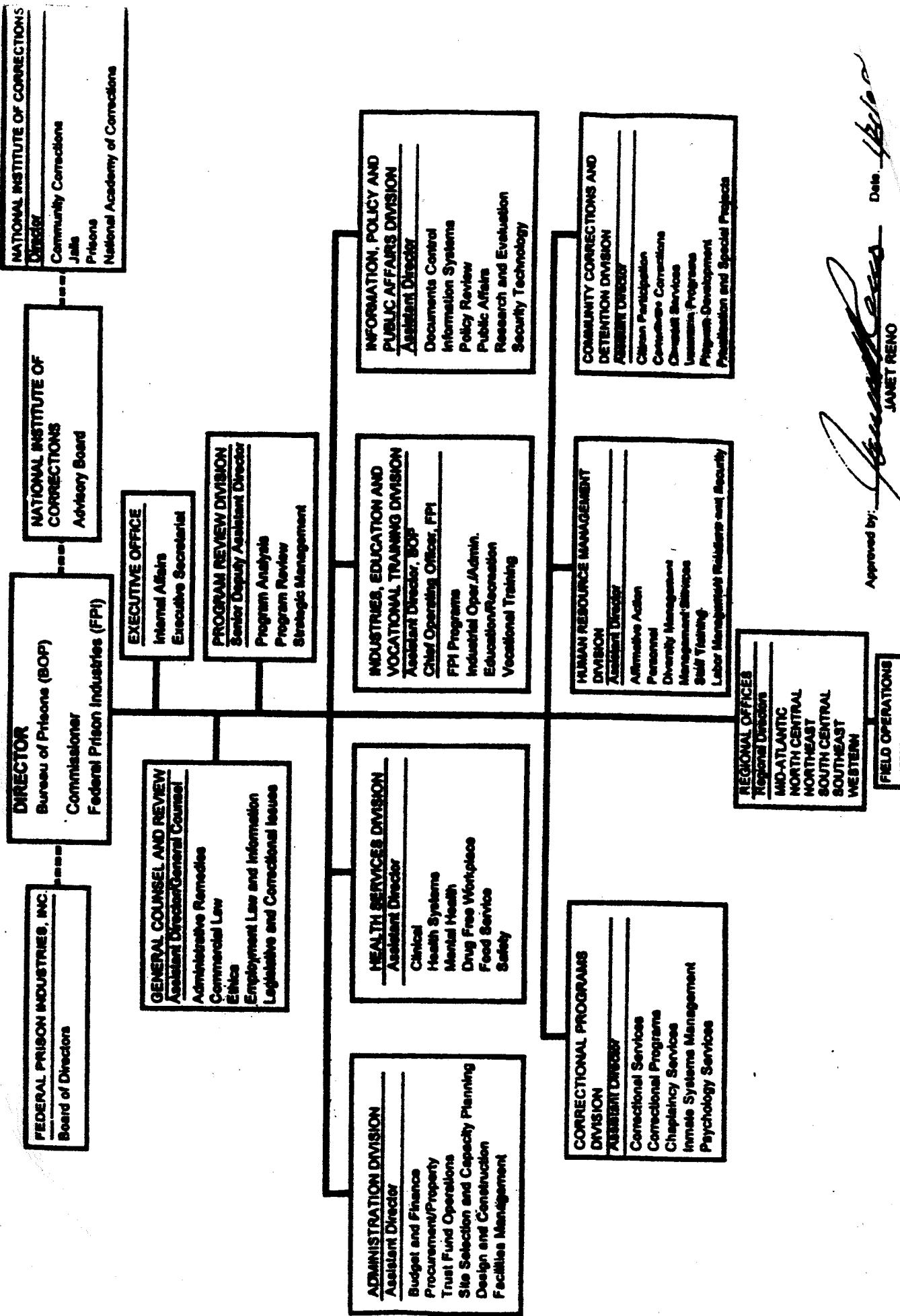
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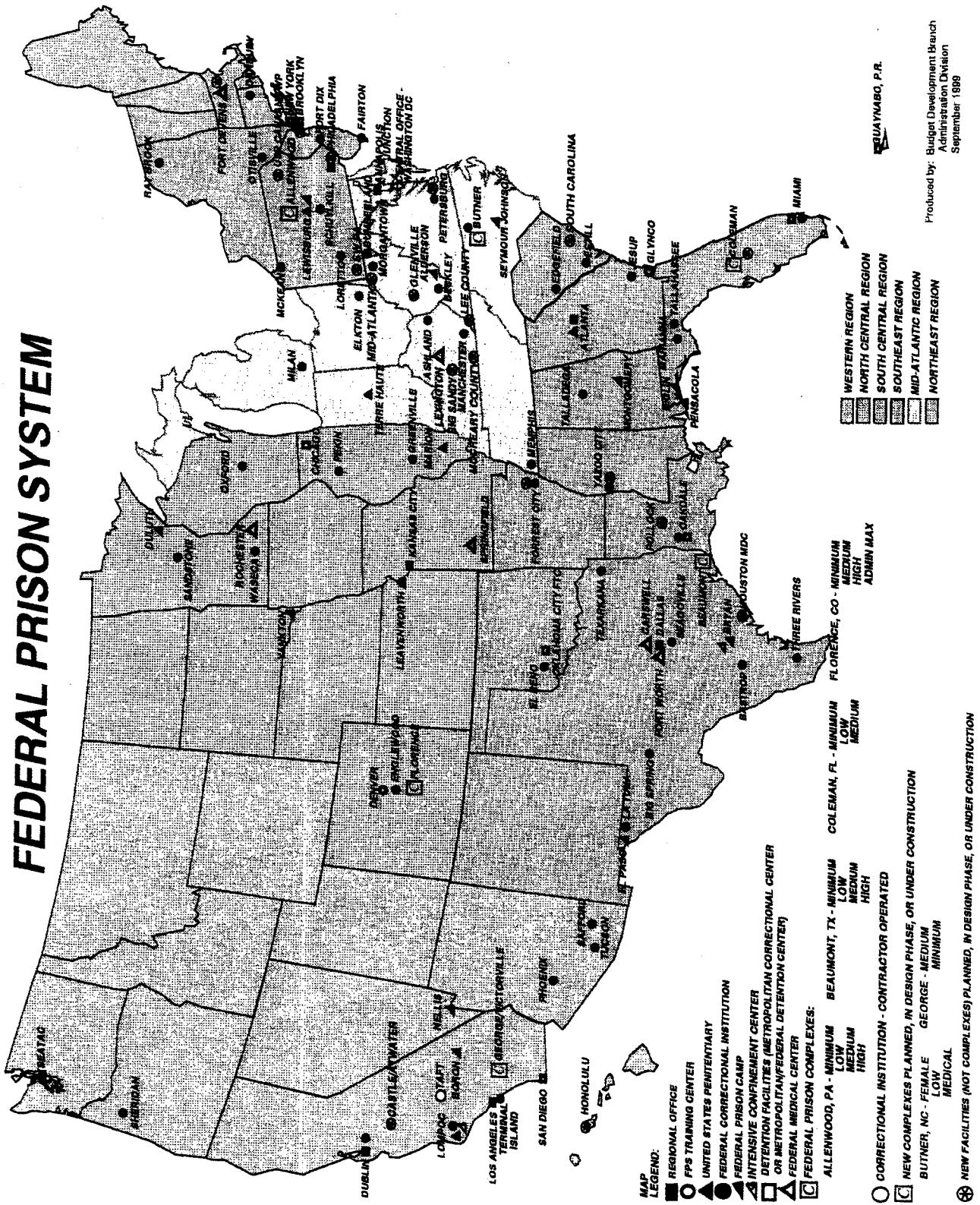
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Appendix

FEDERAL BUREAU OF PRISONS

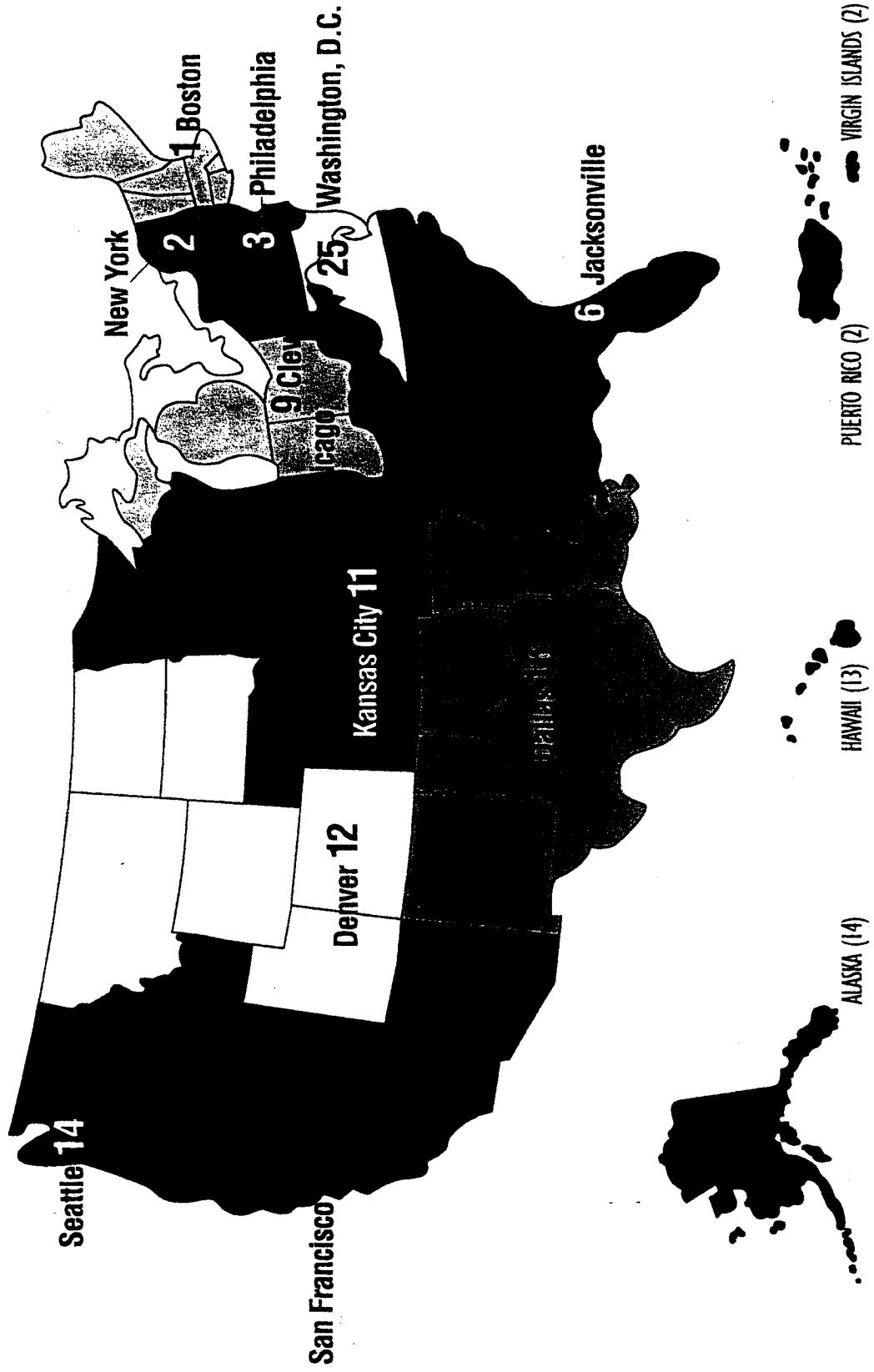


FEDERAL PRISON SYSTEM



District Office Territorial Jurisdiction Under The Federal Employees' Compensation Act

| District Office | No. |
|------------------|-----|
| Boston | 1 |
| New York | 2 |
| Philadelphia | 3 |
| Jacksonville | 6 |
| Cleveland | 9 |
| Chicago | 10 |
| Kansas City | 11 |
| Denver | 12 |
| San Francisco | 13 |
| Seattle | 14 |
| Dallas | 16 |
| Washington, D.C. | 25 |



PERSONAL WELL-BEING

The purpose of this section is to get information about your health over the last six months. Your responses will be used to assess how the work environment affects staff's sense of their personal well-being.

| | |
|--|----------------------------|
| | Every Day |
| | A Few Times a Week |
| | Once a Week |
| | A Few Times a Month |
| | Once a Month |
| | A Few Times |
| | Never |

During the past 6 months,
how often have you had:

1. Recurring headaches? ① ② ③ ④ ⑤ ⑥ ⑦
2. A poor appetite? ① ② ③ ④ ⑤ ⑥ ⑦
3. A disturbed or restless sleep? ① ② ③ ④ ⑤ ⑥ ⑦
4. A concern that something is wrong with your body? ① ② ③ ④ ⑤ ⑥ ⑦
5. A feeling of tenseness or anxiety? ① ② ③ ④ ⑤ ⑥ ⑦
6. A feeling of hopelessness? ① ② ③ ④ ⑤ ⑥ ⑦
7. A difficulty in concentrating? ① ② ③ ④ ⑤ ⑥ ⑦
8. A feeling of worthlessness? ① ② ③ ④ ⑤ ⑥ ⑦
9. A stomach problem related to digestion? ① ② ③ ④ ⑤ ⑥ ⑦
10. Muscle aches? ① ② ③ ④ ⑤ ⑥ ⑦
11. Back problems (for example, lower back pain, muscle spasms)? ① ② ③ ④ ⑤ ⑥ ⑦
12. A feeling of depression? ① ② ③ ④ ⑤ ⑥ ⑦
13. A feeling that you are worrying too much? ① ② ③ ④ ⑤ ⑥ ⑦
14. A feeling of being weak all over? ① ② ③ ④ ⑤ ⑥ ⑦
15. A feeling that nothing turns out right for you? ① ② ③ ④ ⑤ ⑥ ⑦
16. Personal worries that bothered you? ① ② ③ ④ ⑤ ⑥ ⑦
17. A wondering if anything is worthwhile? ① ② ③ ④ ⑤ ⑥ ⑦

| | |
|--|----------------------------|
| | Every Day |
| | A Few Times a Week |
| | Once a Week |
| | A Few Times a Month |
| | Once a Month |
| | A Few Times |
| | Never |

During the past 6 months,
how often have you had:

18. A feeling of frustration by your job? ① ② ③ ④ ⑤ ⑥ ⑦
19. A feeling that everything is going wrong? ① ② ③ ④ ⑤ ⑥ ⑦
20. A feeling of worry about your family? ① ② ③ ④ ⑤ ⑥ ⑦
21. A feeling of worry about money problems? ① ② ③ ④ ⑤ ⑥ ⑦
22. A feeling of being very angry? ① ② ③ ④ ⑤ ⑥ ⑦

Questions 23 and 24 ask you about any increases or decreases in your consumption of tobacco or alcohol *during the past 6 months*:

| | |
|--|-------------------------------|
| | Increased a Great Deal |
| | Increased Slightly |
| | Stayed the Same |
| | Decreased Slightly |
| | Decreased a Great Deal |
| | Not Applicable |

During the past 6 months:

23. Has your consumption of tobacco: ① ② ③ ④ ⑤ ⑥
24. Has your consumption of alcohol: ① ② ③ ④ ⑤ ⑥
25. Do you engage regularly in any exercise at all?

① No
② Yes

Federal Employee's Notice of
Traumatic Injury and Claim for
Continuation of Pay/Compensation

U.S. Department of Labor
Employment Standards Administration /
Office of Workers' Compensation Programs



Employee: Please complete all boxes 1 - 15 below. Do not complete shaded areas.

Witness: Complete bottom section 16.

Employing Agency (Supervisor or Compensation Specialist): Complete shaded boxes a, b, and c.

Employee Data

| | | | |
|--|-------------|---|--|
| 1. Name of employee (Last, First, Middle) | | 2. Social Security Number | |
| 3. Date of birth | Mo. Day Yr. | 4. Sex | 5. Home telephone |
| | | <input type="checkbox"/> Male <input type="checkbox"/> Female | () |
| 7. Employee's home mailing address (include city, state, and ZIP code) | | | 6. Grade as of date of injury |
| | | | Level Step |
| | | | 8. Dependents |
| | | | <input type="checkbox"/> Wife, Husband <input type="checkbox"/> Children under 18 years <input type="checkbox"/> Other |

Description of Injury

| | | | |
|--|------|---|---------------------------|
| 9. Place where injury occurred (e.g. 2nd floor, Main Post Office Bldg., 12th & Pine) | | | |
| 10. Date injury occurred | Time | 11. Date of this notice | 12. Employee's occupation |
| Mo. Day Yr. | : | <input type="checkbox"/> a.m. <input type="checkbox"/> p.m. | Mo. Day Yr. |
| 13. Cause of injury (Describe what happened and why) | | | |

| | | |
|--|--|--------------------|
| 14. Nature of injury (Identify both the injury and the part of body, e.g., fracture of left leg) | | a. Occupation code |
| | | b. Type code |
| | | c. Source code |
| OWCP Use - NOI Code | | |

Employee Signature

| | | |
|--|--|--|
| 15. I certify, under penalty of law, that the injury described above was sustained in performance of duty as an employee of the United States Government and that it was not caused by my willful misconduct, intent to injure myself or another person, nor by my intoxication. I hereby claim medical treatment, if needed, and the following, as checked below, while disabled for work: | | |
| <input type="checkbox"/> a. Continuation of regular pay (COP) not to exceed 45 days and compensation for wage loss if disability for work continues beyond 45 days. If my claim is denied, I understand that the continuation of my regular pay shall be charged to sick or annual leave, or be deemed an overpayment within the meaning of 5 USC 5584. | | |
| <input type="checkbox"/> b. Sick and/or Annual Leave | | |
| I hereby authorize any physician or hospital (or any other person, institution, corporation, or government agency) to furnish any desired information to the U.S. Department of Labor, Office of Workers' Compensation Programs (or to its official representative). This authorization also permits any official representative of the Office to examine and to copy any records concerning me. | | |

Signature of employee or person acting on his/her behalf

Date

Any person who knowingly makes any false statement, misrepresentation, concealment of fact or any other act of fraud to obtain compensation as provided by the FECA or who knowingly accepts compensation to which that person is not entitled is subject to civil or administrative remedies as well as felony criminal prosecution and may, under appropriate criminal provisions, be punished by a fine or imprisonment or both.

Have your supervisor complete the receipt attached to this form and return it to you for your records.

Witness Statement

| |
|--|
| 16. Statement of witness (Describe what you saw, heard, or know about this injury) |
|--|

| | | | |
|-----------------|----------------------|-------------|----------|
| Name of witness | Signature of witness | Date signed | |
| Address | City | State | ZIP Code |

Official Supervisor's Report: Please complete information requested below:**Supervisor's Report**

17. Agency name and address of reporting office (include city, state, and ZIP code)

OWCP Agency Code

OSHA Site Code

ZIP Code

18. Employee's duty station (Street address and ZIP code)

ZIP Code

19. Regular

work hours

From: a.m. p.m.To: a.m. p.m.

20. Regular

work schedule

 Sun. Mon. Tues. Wed. Thurs. Fri. Sat.

21. Date of

Injury

Mo. Day

Yr.

24. Date pay

stopped

Mo. Day

Yr.

27. Was employee injured in performance of duty? Yes No (If "No," explain)28. Was injury caused by employee's willful misconduct, intoxication, or intent to injure self or another? Yes (If "Yes," explain) No

29. Was injury caused by third party?

 Yes No

(If "No," go to item 31.)

30. Name and address of third party (Include city, state, and ZIP code)

31. Name and address of physician first providing medical care (Include city, state, ZIP code)

32. First date medical care received Mo. Day Yr.

33. Do medical reports show Yes No employee is disabled for work?34. Does your knowledge of the facts about this injury agree with statements of the employee and/or witness? Yes No (If "No," explain)

35. If the employing agency contests continuation of pay, state the reason in detail.

36. Pay rate when employee stopped work

\$

Per

Signature of Supervisor and Filing Instructions

37. A supervisor who knowingly certifies to any false statement, misrepresentation, concealment of fact, etc., in respect of this claim may also be subject to appropriate felony criminal prosecution.

I certify that the information given above and that furnished by the employee on the reverse of this form is true to the best of my knowledge with the following exception:

Name of supervisor (Type or print)

Signature of supervisor

Date

Supervisor's Title

Office phone

38. Filing instructions

- No lost time and no medical expense: Place this form in employee's medical folder (SF-66-D)
- No lost time, medical expense incurred or expected: forward this form to OWCP
- Lost time covered by leave, LWOP, or COP: forward this form to OWCP
- First Aid Injury

Disability Benefits for Employees under the Federal Employees' Compensation Act (FECA)

The FECA, which is administered by the Office of Workers' Compensation Programs (OWCP), provides the following benefits for job-related traumatic injuries:

- (1) Continuation of pay for disability resulting from traumatic, job-related injury, not to exceed 45 calendar days. (To be eligible for continuation of pay, the employee, or someone acting on his/her behalf, must file Form CA-1 within 30 days following the injury; however, to avoid possible interruption of pay, the form should be filed within 2 working days. If the form is not filed within 30 days, compensation may be substituted for continuation of pay.)
- (2) Payment of compensation for wage loss after the 45 days, if disability extends beyond such period.
- (3) Payment of compensation for permanent impairment of certain organs, members, or functions of the body (such as loss or loss of use of an arm or kidney, loss of vision, etc.), or for serious disfigurement of the head, face, or neck.
- (4) Vocational rehabilitation and related services where necessary.
- (5) Full medical care from either Federal medical officers and hospitals, or private hospitals or physicians, of the employee's choice. Generally, 25 miles from the place of injury, place of employment, or employee's home is a reasonable distance to travel for medical care; however, other pertinent facts must also be considered in making selection of physicians or medical facilities.

At the time an employee stops work following a traumatic, job-related injury, he or she may request continuation of pay or use sick or annual leave credited to his or her record. Where the employing agency continues the employee's pay, the pay must not be interrupted until:

- (1) The employing agency receives medical information from the attending physician to the effect that disability has terminated;
- (2) The OWCP advises that pay should be terminated; or
- (3) The expiration of 45 calendar days following initial work stoppage.

If disability exceeds, or it is anticipated that it will exceed, 45 days, and the employee wishes to claim compensation, Form CA-7, with supporting medical evidence, must be filed with OWCP. To avoid interruption of income, the form should be filed on the 40th day of the COP period. Form CA-3 shall be submitted to OWCP when the employee returns to work, disability ceases, or the 45 days period expires.

For additional information, review the regulations governing the administration of the FECA (Code of Federal Regulations, Title 20, Chapter 1) or Chapter 810 of the Office of Personnel Management's Federal Personnel Manual.

Privacy Act

In accordance with the Privacy Act of 1974 (Public Law No. 93-579, 5 U.S.C. 552a) and the Computer Matching and Privacy Protection Act of 1988 (Public Law No. 100-503), you are hereby notified that: (1) The Federal Employees' Compensation Act, as amended (5 U.S.C. 8101, et seq.) is administered by the Office of Workers' Compensation Programs of the U.S. Department of Labor. In accordance with this responsibility, the Office receives and maintains personal information on claimants and their immediate families. (2) The information will be used to determine eligibility for and the amount of benefits payable under the Act. (3) The information collected by this form and other information collected in relation to your compensation claim may be verified through computer matches. (4) The information may be given to Federal, State, and local agencies for law enforcement and for other lawful purposes in accordance with routine uses published by the Department of Labor in the Federal Register. (5) Failure to furnish all requested information may delay the process, or result in an unfavorable decision or a reduced level of benefits. (Disclosure of a social security number (SSN) is voluntary; the failure to disclose such number will not result in the denial of any right, benefit or privilege to which an individual may be entitled. Your SSN may be used to request information about you from employers and others who know you, but only as allowed by law or Presidential directive. The information collected by using your SSN may be used for studies, statistics, and computer matching to benefit and payment files.)

Receipt of Notice of Injury

This acknowledges receipt of Notice of Injury sustained by
(Name of injured employee)

Which occurred on (Mo., Day, Yr.)

At (Location)

Signature of Official Superior

Title

Date (Mo., Day, Yr.)

Instructions for Completing Form CA-1

Complete all items on your section of the form. If additional space is required to explain or clarify any point, attach a supplemental statement to the form. Some of the items on the form which may require further clarification are explained below.

Employee (Or person acting on the employee's behalf)

13) Cause of Injury

Describe in detail how and why the injury occurred. Give appropriate details (e.g.: if you fell, how far did you fall and in what position did you land?)

14) Nature of Injury

Give a complete description of the condition(s) resulting from your injury. Specify the right or left side if applicable (e.g., fractured left leg; cut on right index finger).

15) Election of COP/Leave

If you are disabled for work as a result of this injury and file CA-1 within thirty days of the injury, you are entitled to receive continuation of pay (COP) from your employing agency. COP is

paid for up to 45 calendar days of disability, and is not charged against sick or annual leave. You may elect sick or annual leave if you wish, but compensation from OWCP may not be claimed during the 45 days of COP entitlement. (You may not claim compensation to repurchase leave used during this period.) Also, if you change your election within one year, the agency is obliged to convert past periods of leave to COP, which qualify.

Your agency may controvert (dispute) your entitlement to COP, but must continue pay unless the controversion is based on one of the nine reasons listed in the instructions for item 35.

If you receive COP, but OWCP later determines that you are not entitled to COP, you may either change COP to sick or annual leave or pay the employing agency back for the COP received.

Supervisor

At the time the form is received, complete the receipt of notice of injury and give it to the employee. In addition to completing items 17 through 38, the supervisor is responsible for obtaining the witness statement in item 16 and for filling in the proper codes in shaded boxes a, b, and c on the front of the form. If medical expense or lost time is incurred or expected, the completed form should be sent to OWCP within 10 working days after it is received.

The supervisor should also submit any other information or evidence pertinent to the merits of this claim.

If the employing agency controverts COP, the employee should be notified and the reason for controversion explained to him or her.

17) Agency name and address of reporting office

The name and address of the office to which correspondence from OWCP should be sent (if applicable, the address of the personnel or compensation office).

18) Duty station street address and zip code

The address and zip code of the establishment where the employee actually works.

29) Was injury caused by third party?

A third party is an individual or organization (other than the injured employee or the Federal government) who is liable for the injury. For instance, the driver of a vehicle causing an accident in which an employee is injured, the owner of a building where unsafe conditions cause an employee to fall, and a manufacturer whose defective product causes an employee's injury, could all be considered third parties to the injury.

31) Name and address of physician first providing medical care

The name and address of the physician who first provided medical care for this injury. If initial care was given by a nurse or other health professional (not a physician) in the employing agency's health unit or clinic, indicate this on a separate sheet of paper.

32) First date medical care received

The date of the first visit to the physician listed in item 31.

35) Does the employing agency controvert continuation of pay?

COP may be controverted (disputed) for any reason; however, the employing agency may refuse to pay COP only if the controversion is based upon one of the nine reasons given below:

- a) The disability results from an occupational disease or illness;
- b) The employee is a volunteer working without pay or for nominal pay, or a member of the office staff of a former President;
- c) The employee is neither a citizen or a resident of the United States or Canada;
- d) The injury occurred off the employing agency's premises and the employee was not involved in official "off premise" duties;
- e) The injury was proximately caused by the employee's willful misconduct, intent to bring about injury or death to self or another person, or intoxication;
- f) The injury was not reported on Form CA-1 within 30 days following the injury;
- g) Work stoppage first occurred 90 days or more following the injury;
- h) The employee initially reported the injury after his or her employment was terminated; or
- i) The employee is enrolled in the Civil Air Patrol, Peace Corps, Youth Conservation Corps, Work Study Programs, or other similar groups.

Employing Agency - Required Codes

Box a (Occupation Code), Box b (Type Code), Box c (Source Code), OSHA Site Code

The Occupational Safety and Health Administration (OSHA) requires all employing agencies to complete these items when reporting an injury. The proper codes may be found in OSHA Booklet 2014, "Recordkeeping and Reporting Guidelines."

OWCP Agency Code

This is a four-digit (or four digit plus two letter) code used by OWCP to identify the employing agency. The proper code may be obtained from your personnel or compensation office, or by contacting OWCP.

Notice of Occupational Disease
and Claim for Compensation

S. Department of Labor
Employment Standards Administration
Office of Workers' Compensation Programs



Employee: Please complete all boxes 1 - 18 below. Do not complete shaded areas.

Employing Agency (Supervisor or Compensation Specialist): Complete shaded boxes a, b, and c.

Employee Data

| | | | | | | | |
|---|--|--|--|--|--|---------------------------|--|
| 1. Name of employee (Last, First, Middle) | | | | | | 2. Social Security Number | |
|---|--|--|--|--|--|---------------------------|--|

| | | | | | | | | |
|------------------|-----|-----|-----|--------|-------------------------------|---|-------|------|
| 3. Date of birth | Mo. | Day | Yr. | 4. Sex | 5. Home telephone () | 6. Grade as of date of last exposure | Level | Step |
|------------------|-----|-----|-----|--------|-------------------------------|---|-------|------|

| | | | | | | | | |
|--|--|--|--|--|--|---|--|--|
| 7. Employee's home mailing address (Include city, state, and ZIP Code) | | | | | | 8. Dependents <input type="checkbox"/> Wife, Husband <input type="checkbox"/> Children under 18 years <input type="checkbox"/> Other | | |
|--|--|--|--|--|--|---|--|--|

Claim Information

| | | | | | | | | |
|--------------------------|--|--|--|--|--|--------------------|--|--|
| 9. Employee's occupation | | | | | | a. Occupation code | | |
|--------------------------|--|--|--|--|--|--------------------|--|--|

| | | | | | | | | |
|--|--|--|--|--|--|---|--|--|
| 10. Location (address) where you worked when disease or illness occurred (Include city, state, and ZIP Code) | | | | | | 11. Date you first became aware of disease or illness Mo. Day Yr. | | |
|--|--|--|--|--|--|---|--|--|

| | | | | | | | |
|--|--|---|--|--|--|--|--|
| 12. Date you first realized the disease or illness was caused or aggravated by your employment | Mo. Day Yr. | 13. Explain the relationship to your employment, and why you came to this realization | | | | | |
|--|--|---|--|--|--|--|--|

| | | | | | | | | |
|----------------------------------|--|--|--|--|--|---------------------|----------------|--|
| 14. Nature of disease or illness | | | | | | OWCP Use - NOI Code | | |
| | | | | | | b. Type code | c. Source code | |

15. If this notice and claim was not filed with the employing agency within 30 days after date shown above in item #12, explain the reason for the delay.

16. If the statement requested in item 1 of the attached instructions is not submitted with this form, explain reason for delay.

17. If the medical reports requested in item 2 of attached instructions are not submitted with this form, explain reason for delay.

Employee Signature

18. I certify, under penalty of law, that the disease or illness described above was the result of my employment with the United States Government, and that it was not caused by my willful misconduct, intent to injure myself or another person, nor by my intoxication. I hereby claim medical treatment, if needed, and other benefits provided by the Federal Employees' Compensation Act.

Signature of employee or person acting on his/her behalf _____ Date _____

Have your supervisor complete the receipt attached to this form and return it to you for your records.

Any person who knowingly makes any false statement, misrepresentation, concealment of fact or any other act of fraud to obtain compensation as provided by the FECA or who knowingly accepts compensation to which that person is not entitled is subject to civil or administrative remedies as well as felony criminal prosecution and may, under appropriate criminal provisions, be punished by a fine or imprisonment or both.

Official Supervisor's Report of Occupational Disease: Please complete information requested below.

Supervisor's Report

| | | | |
|--|---|--|--|
| 19. Agency name and address of reporting office (Include city, state, and ZIP Code) | | OWCP Agency Code | |
| | | OSHA Site Code | |
| ZIP Code | | | |
| 20. Employee's duty station (Street address and ZIP Code) | | ZIP Code | |
| 21. Regular work hours | <input type="checkbox"/> a.m. <input type="checkbox"/> a.m. From: : <input type="checkbox"/> p.m. To: : <input type="checkbox"/> p.m. | 22. Regular work schedule | <input type="checkbox"/> Sun. <input type="checkbox"/> Mon. <input type="checkbox"/> Tues. <input type="checkbox"/> Wed. <input type="checkbox"/> Thurs. <input type="checkbox"/> Fri. <input type="checkbox"/> Sat. |
| 23. Name and address of physician first providing medical care (Include city, state, ZIP Code) | | 24. First date medical care received | Mo. Day Yr. |
| | | | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |
| | | 25. Do medical reports show employee is disabled for work? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 26. Date employee first reported condition to supervisor | Mo. Day Yr. | 27. Date and hour employee stopped work | Mo. Day Yr. Time : <input type="checkbox"/> a.m. <input type="checkbox"/> p.m. |
| 28. Date and hour employee's pay stopped | Mo. Day Yr. Time : <input type="checkbox"/> a.m. <input type="checkbox"/> p.m. | 29. Date employee was last exposed to conditions alleged to have caused disease or illness | Mo. Day Yr. |
| 30. Date returned to work | Mo. Day Yr. Time : <input type="checkbox"/> a.m. <input type="checkbox"/> p.m. | | |
| 31. If employee has returned to work and work assignment has changed, describe new duties | | | |
| 32. Was injury caused by third party? | 33. Name and address of third party (Include city, state, and ZIP Code) | | |
| <input type="checkbox"/> Yes <input type="checkbox"/> No If "No," go to item 34. | | | |
| | | | |

Signature of Supervisor

34. A supervisor who knowingly certifies to any false statement, misrepresentation, concealment of fact, etc., in respect to this claim may also be subject to appropriate felony criminal prosecution.

I certify that the information given above and that furnished by the employee on the reverse of this form is true to the best of my knowledge with the following exception:

Name of Supervisor (Type or print)

Signature of Supervisor

Date _____

Supervisor's Title

Office phone

Disability Benefits for Employees under the Federal Employees' Compensation Act (FECA)

The FECA, which is administered by the Office of Workers' Compensation Programs (OWCP), provides the following general benefits for employment-related occupational disease or illness:

- (1) Full medical care from either Federal medical officers and hospitals, or private hospitals or physicians of the employee's choice.
- (2) Payment of compensation for total or partial wage loss.
- (3) Payment of compensation for permanent impairment of certain organs, members, or functions of the body (such as loss or loss of use of an arm or kidney, loss of vision, etc.), or for serious disfigurement of the head, face, or neck.
- (4) Vocational rehabilitation and related services where necessary.

The first three days in a non-pay status are waiting days, and no compensation is paid for these days unless the period of disability exceeds 14 calendar days, or the employee has suffered a permanent disability. Compensation for total disability is generally paid at the rate of 2/3 of an employee's salary if there are no dependents, or 3/4 of salary if there are one or more dependents.

If an employee is in doubt about compensation benefits, the OWCP District Office servicing the employing agency should be contacted. (Obtain the address from your employing agency.)

For additional information, review the regulations governing the administration of the FECA (Code of Federal Regulations, Title 20, Chapter 1) or Chapter 810 of the Office of Personnel Management's Federal Personnel Manual.

Privacy Act

In accordance with the Privacy Act of 1974 (Public Law No. 93-579, 5 U.S.C. 552a) and the Computer Matching and Privacy Protection Act of 1988 (Public Law No. 100-503), you are hereby notified that: (1) The Federal Employees' Compensation Act, as amended (5 U.S.C. 8101, et seq.) is administered by the Office of Workers' Compensation Programs of the U.S. Department of Labor. In accordance with this responsibility, the Office receives and maintains personal information on claimants and their immediate families. (2) The information will be used to determine eligibility for and the amount of benefits payable under the Act. (3) The information collected by this form and other information collected in relation to your compensation claim may be verified through computer matches. (4) The information may be given to Federal, State, and local agencies for law enforcement and for other lawful purposes in accordance with routine uses published by the Department of Labor in the Federal Register. (5) Failure to furnish all requested information may delay the process, or result in an unfavorable decision or a reduced level of benefits. (Disclosure of a social security number (SSN) is voluntary; the failure to disclose such number will not result in the denial of any right, benefit or privilege to which an individual may be entitled. Your SSN may be used to request information about you from employers and others who know you, but only as allowed by law or Presidential directive. The information collected by using your SSN may be used for studies, statistics, and computer matching to benefit and payment files.)

Receipt of Notice of Occupational Disease or Illness

This acknowledges receipt of notice of disease or illness sustained by:
(Name of injured employee)

I was first notified about this condition on (Mo., Day, Yr.)

At (Location)

Signature of Official Superior

Title

Date (Mo., Day, Yr.)

This receipt should be retained by the employee as a record that notice was filed.

INSTRUCTIONS FOR COMPLETING FORM CA-2

Complete all items on your section of the form. If additional space is required to explain or clarify any point, attach a supplemental statement to the form. In addition to the information requested on the form, both the employee and the supervisor are required to submit additional evidence as described below. If this evidence is not submitted along with the form, the responsible party should explain the reason for the delay and state when the additional evidence will be submitted.

Employee (or person acting on the employee's behalf)

Complete items 1 through 18 and submit the form to the employee's supervisor along with the statement and medical reports described below. Be sure to obtain the Receipt of Notice of Disease or Illness completed by the supervisor at the time the form is submitted.

1) Employee's statement

In a separate narrative statement attached to the form, the employee must submit the following information:

- a) A detailed history of the disease or illness from the date it started.
- b) Complete details of the conditions of employment which are believed to be responsible for the disease or illness.
- c) A description of specific exposures to substances or stressful conditions causing the disease or illness, including locations where exposure or stress occurred, as well as the number of hours per day and days per week of such exposure or stress.
- d) Identification of the part of the body affected. (If disability is due to a heart condition, give complete details of all activities for one week prior to the attack with particular attention to the final 24 hours of such period.)
- e) A statement as to whether the employee ever suffered a similar condition. If so, provide full details of onset, history, and medical care received, along with names and addresses of physicians rendering treatment.

Supervisor (Or appropriate official in the employing agency)

At the time the form is received, complete the Receipt of Notice of Disease or Illness and give it to the employee. In addition to completing items 19 through 34, the supervisor is responsible for filling in the proper codes in shaded boxes a, b, and c on the front of the form. If medical expense or lost time is incurred or expected, the completed form must be sent to OWCP within ten working days after it is received. In a separate narrative statement attached to the form, the supervisor must:

- a) Describe in detail the work performed by the employee. Identify fumes, chemicals, or other irritants or situations that the employee was exposed to which allegedly caused the condition. State the nature, extent, and duration of the exposure, including hours per days and days per week, requested above.
- b) Attach copies of all medical reports (including x-ray reports and laboratory data) on file for the employee.
- c) Attach a record of the employee's absence from work caused by any similar disease or illness. Have the employee state the reason for each absence.
- d) Attach statements from each co-worker who has first-hand knowledge about the employee's condition and its cause. (The co-workers should state how such knowledge was obtained.)
- e) Review and comment on the accuracy of the employee's statement requested above.

The supervisor should also submit any other information or evidence pertinent to the merits of this claim.

Item Explanations: Some of the items on the form which may require further clarification are explained below.**14. Nature of the disease or illness**

Give a complete description of the disease or illness. Specify the left or right side if applicable (e.g., rash on left leg; carpal tunnel syndrome, right wrist).

19. Agency name and address of reporting office

The name and address of the office to which correspondence from OWCP should be sent (if applicable, the address of the personnel or compensation office).

20. Employee's duty station, street address and ZIP Code

The street address and ZIP Code of the establishment where the employee actually works.

23. Name and address of physician first providing medical care

The name and address of the physician who first provided medical care for this injury. If initial care was given by a nurse or other health professional (not a physician) in the employing agency's health unit or clinic, indicate this on a separate sheet of paper.

24. First date medical care received

The date of the first visit to the physician listed in item 23.

32. Was the injury caused by third party?

A third party is an individual or organization (other than the injured employee or the Federal government) who is liable for the disease. For instance, manufacturer of a chemical to which an employee was exposed might be considered a third party if improper instructions were given by the manufacturer for use of the chemical.

Employing Agency - Required Codes**Box a (Occupational Code), Box b, (Type Code), Box c (Source Code), OSHA Site Code**

The Occupational Safety and Health Administration (OSHA) requires all employing agencies to complete these items when reporting an injury. The proper codes may be found in OSHA Booklet 2014, Record Keeping and Reporting Guidelines.

OWCP Agency Code

This is a four digit (or four digit two letter) code used by OWCP to identify the employing agency. The proper code may be obtained from your personnel or compensation office, or by contacting OWCP.



U.S. Department of Justice

Federal Bureau of Prisons

Washington, DC 20534

January 14, 1999

MEMORANDUM FOR NEWTON KENDIG, M.D., ACTING MEDICAL DIRECTOR
HEALTH SERVICES DIVISION

FROM: *John S. Gervais Jr.*
Thomas R. Kane, Assistant Director
Information, Policy, and Public Affairs Division

SUBJECT: Research Proposal of Casey Skvorc

This is in response to a request by Casey Skvorc, Workers' Compensation Coordinator, Health Services Division, to conduct a study entitled, "Occupational Stress, Perception of Well-Being, and Health Related Behaviors in Federal Correctional Workers."

We concur with your recommendation for approval, and Mr. Skvorc is authorized to proceed with his study, subject to the capability of the staff to accommodate him.

Any questions that arise may be directed to Gerry Gaes, Chief, Office of Research and Evaluation, at (202) 307-3871, ext. 115.

cc: William Saylor, Office of Research and Evaluation, IPPA
Ben Wheat, Employee Assistance Program Coordinator, CPD
Casey Skvorc, Workers' Compensation Coordinator, HSD